EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-1

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	IPM Architecture Maintenance and Enhancement

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	All

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 03/28/08 To: 03/10/09

Comments:
The Contractor shall prepare a work plan and cost estimate.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	4,400

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 4,400

Work Assignment Manager Name ELLIOT R. LIEBERMAN (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202.343.9136 Fax Number 202.343.2359
Project Officer Name ANDREA L. BRUNSMAN (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564.9699 Fax Number 202.565.2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name ANDREA L. BRUNSMAN Andrea L. Brunsman 3/28/08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564.9699 Fax Number 202.565.2554

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		IPM Architecture Maintenance and Enhancement
Period of Performance:	From:	03/28/08
	To:	03/10/09
Award Date:		03/28/08
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

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Attachments

Attachment Name
Statement of Work

WORK ASSIGNMENT
STATEMENT OF WORK

Title IPM Architecture Maintenance and Enhancement

Contractor and Contract #: EP-W-08-018 (ICF)

Work Assignment #: WA 0-1

Estimated Level of Effort: 4,400 hours

EPA Key Personnel:

Work Assignment Contracting Officer's Representative (COR):

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I. BACKGROUND AND PURPOSE

Electric power plants are a significant source of sulfur dioxide (SO2), nitrogen oxides (NOx), mercury (Hg), and carbon dioxide (CO2) emissions and thus affect a number of air pollution issues.

To evaluate alternative multi-pollutant strategies for reducing air emissions from electric power plants, EPA uses the Integrated Planning Model (IPM), a model of the U.S. electric power sector developed and maintained by ICF Consulting, Inc.. To keep its IPM based projections current, EPA would like to continue to update assumptions that drive this model. The EPA Base Case assumptions were developed under Contract 68-W6-0049, Work Assignments 02AA-13, 03AA-13, 04AA-28, and 05AA-28 and updated and enhanced under contracts 68-D7-0081, Task Orders 10, 15, and 31, and contract 68-W-03-028, Work Assignments 1-3, 2-3, 3-3, and 4-3.

IPM is a power sector model that makes production cost and long term investment decisions in a least cost framework. It allows EPA to perform environmental policy analysis under a range of alternative emission strategies. IPM and the EPA Base Case assumptions have undergone extensive periodic peer review, which has given it a high level of credibility both in the scientific and regulated community.

Under this Work Assignment the Contractor shall update selected parameters, enhance capabilities to analyze policy scenarios scheduled for consideration over the next 12-18 months, improve reporting capabilities, support peer review of these updates and enhancements, improve model runtime, and perform further IPM runs. The primary focus of this work assignment will be on bringing to completion model development work and related diagnostic, validation, documentation, and peer review activities on a new IPM U.S. base case v.4.0. Initiated under Work Assignments 3-3 and 4-3 (Contract 68-W-03-028), this new base

case was originally designated as v.3.1, but is being renamed v.4.0 due to the inclusion of major new capabilities, needed for greenhouse gas modeling.

In addition, this work assignment will include initial activities on EPA's next IPM base case v.5.0 (which will include updating and expanding IPM's resource and technology assumptions to support bottom-up modeling through 2070), completion of model development activities for an IPM Mexico module (which had been re-started at the end of WA 4-3 after being previously deferred due to limitations on EPA staff time), development and other technical support activities for coordinated modeling using IPM and EIA's NEMS (National Energy Modeling System) model, and model development work on one other non-U.S. IPM module (e.g., IPM China).

This work assignment also includes performing model runs and follow-up analysis for comparative modeling exercises, e.g., those sponsored by Stanford University's Energy Modeling Forum and by the Department of Energy's Renewable Energy Modeling and Analysis Partnership (REMAP).

None of the work performed under this work assignment will duplicate work performed under previous work assignments or task orders.

II. CONTRACT LEVEL STATEMENT OF WORK REFERENCE

The tasks to be performed under this work assignment are consistent with the provisions of Attachment 1 (Statement of Work) for Contract EP-W-08-018.

III. STATEMENT OF WORK TASKS

Task 1— Prepare Work Plan: The Contractor shall prepare a Work Plan in accordance with the terms and conditions of contract clause B.2 entitled "Work Assignments" and the section of contract Attachment 1 entitled "Preparation and Submission of Work Plans."

Note: Development work on IPM U.S., IPM Mexico, and one other non-U.S. IPM module will be performed under the tasks below. Separate from and in addition to the contractor's standard monthly "Financial Detail Task Order Report," the contractor's monthly Technical Progress Report for this work assignment shall report total monthly and cumulative hours separately for IPM U.S., IPM Mexico, and any other non-U.S. IPM modules.

Task 2 — Design, Programming, Testing, and Implementation of Selected Updates and Enhancements of IPM

The Contractor shall update selected internal parameters and capabilities of the Integrated Planning Model and EPA Base Case assumptions to ensure that model results are based on the most recent input data. The COR will specify in technical direction (TD) the particular functional areas to be updated. These functional areas include updating the NEEDS (National Electric Energy Data System) database of existing and planned electric generating units, updating the cost and performance assumptions of new electric generating, and emission control technologies, fuel cost and supply assumptions, emission and heat rate assumptions, power system operation assumptions, Federal and state environmental and renewable energy regulations, financial assumptions, and run year assumptions.

For selected functional areas and at the direction of the COR, the Contractor shall prepare a typed 5-15 page issue paper that will include the description of the parameters and capabilities to be updated, the policy and technical issues to be resolved, and the sources of data for the update.

Based on the COR's review, feedback and TD authorizing the implementation of the update, the Contractor shall design and implement the update. The Contractor shall provide the COR with interim deliverables adequate to monitor the progress of these activities. At the time of initial testing and immediately before deployment of the functional improvements, the Contractor shall provide the COR with input (e.g., DAT and EMS files) and output report files (e.g., RPT and RPE files) demonstrating the capabilities of the improvements.

For the purposes of budgeting, the Contractor shall assume that the COR will request 6-8 issue papers on functional areas identified by the COR. These issue papers may be request on IPM U.S., IPM Mexico, or another non-U.S. IPM module. The COR will review the issue papers, provide feedback and issue technical direction authorizing implementation. The Contractor shall design and implement the approved changes and test them. Once debugging is completed, the Contractor shall provide the COR with interim deliverables to monitor progress of activities, including suitable IPM input and output files.

Under this task, the Contractor shall also revise and enhance the NEEDS Comment Input Tracking Tool previously developed under Work Assignments 3-3 and 4-3(Contract 68-W-03-028). The purpose of the tool is to enable the Contractor, EPA, and others to update the NEEDS database on an ongoing basis, track and screen proposed updates, and generate interim versions of the database between releases of EPA base cases. The Contractor shall propose revisions for EPA review and shall implement revisions selected by EPA. For purposes of budgeting the Contractor shall assume that two rounds of such revisions will be required.

Task 3 — Model Enhancements to Support Analysis of New Environmental Initiatives:

The Contractor shall prepare three 10-20 page technical memoranda for 3-5 model enhancements identified by the COR. These memorandum shall cover one of more of the following areas as identified by the COR: model enhancement option assessments and recommendations, technical specification development, implementation proposals, and areas affecting model realization. Possible topics for these technical memoranda include (but are not limited to) implementation, documentation, and peer review issues involving extending the modeling time horizon out to 2070, modeling the market for renewable energy credits and other enhancements to improve IPM's representation of renewables, issues not previously addressed for modeling greenhouse gas policies, and issues related to modeling the power sector outside the U.S. The COR will review the technical memoranda prepared by the Contractor, provide feedback to resolve technical and policy issues, and issue TD authorizing programming to implement selected enhancements. The Contractor shall implement the selected enhancements and provide the COR with interim deliverables (i.e., diagnostic runs), which will be used to monitor progress and obtain feedback from the COR on further alterations that are necessary before the improvements are fully deployed.

Following up on activities initiated under Work Assignment 4-3 (Contract 68-W-03-028), the Contractor shall provide technical support for information exchanges with the National Renewable Energy Laboratory (NREL) aimed at developing possible improvements for modeling renewables in IPM, including possible improvements to input data files. For purposes of budgeting the Contractor shall plan to participate in 6 one-hour telephone meetings and 2 two-hour onsite meetings at EPA's offices in Washington, D.C.

Task 4 — Reporting Improvements

The Contractor shall work with the COR and EPA analysts on an ongoing basis to identify, develop, and implement new reporting improvements. The Contractor shall obtain feedback on the shortcomings in the current IPM reports and develop prototypes to remedy the shortcomings and provide additional capabilities. For purposes of budgeting, the Contractor shall assume that three prototypes will be required. Each prototype will contain output data from a real IPM run to be selected by the COR and will represent a complete illustration of the improved reporting capability. The Contractor shall consult with the COR about the format of the prototype, which could possibly include a report, data files, software application, or a combination these formats.

Based on comments from EPA staff, the Contractor shall prepare final operational versions of the new reporting prototypes and incorporate them into the standard outputs provided to EPA on all subsequent model runs. Before delivery to EPA the prototypes will be fully tested, debugged, and quality assured to eliminate errors and ensure operability.

Following up on work initiated under Work Assignment 4-3 (Contract 68-W-03-028), the Contractor shall provide technical support for research that EPA is conducting on advanced decision making tools that can be applied to IPM model run inputs and outputs. The Contractor shall also continue to provide technical support for EPA's effort to pass IPM outputs to and receive inputs from economy-wide and energy-sector-wide models (like the Energy Information Administration's National Energy Modeling System (NEMS) model). These technical support activities shall include providing input and output files from previously performed model runs and participation in 10 one-hour telephone meetings on topics related to this project.

Task 5 — Parsing and Streamlining Tool Improvement

The Contractor shall update and make further improvements to the tool used to parse the aggregated model results at the model plant level to the individual generating unit level, with the goal of improving the clarity, consistency, and usability of the resulting output files. Among the topics to be addressed are limitations in the representation of partial retrofits that were not addressed under previous Work Assignments and an improved algorithm for determining the location of new capacity.

The Contractor shall also engage in further enhancements to the Streamlining Tool, the post-processing software which generates parameter values required for air quality modeling. This round of enhancements will involve incorporating into the Streamlining Tool additional improved procedures developed by EPA for calculating emissions not directly represented in the IPM. The Contractor shall prepare a 5-10 page memorandum describing options and a proposed approach. The COR will provide technical direction on the approach that will be implemented. The Contractor shall initiate the update and provide the COR with interim deliverables sufficient to monitor progress.

Task 6 — Validation Evaluations

Under this task, the Contractor shall perform validation exercises that build on those initiated but not completed under Contract 68-W-03-028. The Contractor shall propose additional approaches to validate IPM's long-term capital investment decision making. After review, revision, and authorization to proceed by the COR, the Contractor shall carry out this next phase of validation activities. The Contractor shall provide the COR with interim deliverables adequate to monitor the progress of these activities, including input (e.g., DAT and EMS files) and output report files (e.g., RPT and RPE files) from the IPM validation runs. On completion of this validation exercise, the Contractor shall deliver a 5-15 page technical memorandum containing a detailed description of the data that was used, the procedures that were performed, and the results that were obtained. The contractor shall also deliver data files and model input and output files from the IPM runs that were used in

the validation.

Task 7 — Documentation

The Contractor shall provide tables, figures, and limited text needed to enable EPA to prepare documentation reports for base cases prepared under this Statement of Work.

This will involve preparing an outline for the full report and identifying the tables, figures, text, and other items to be developed by the Contractor. Besides providing comprehensive documentation for the types of assumptions covered under previous base cases, the Contractor shall give particular attention to documenting assumptions that were not included in documentation for previous base cases and to correcting assumptions that were inadequately or wrongly documented in these previous base cases. In this regard, the contractor shall prepare a 5-15 page technical memorandum listing new assumptions that need to be documented and previous assumptions that need to be revised, enhanced or corrected. For each new assumption and revised assumption the technical memorandum shall specify the form that the documentation will assume (i.e., tables, figures, maps, text, etc.).

Using the materials provided by the Contractor, EPA will draft the report. The Contractor shall review and provide comments (using redline and strikeout in an electronic version of the draft report) for two revisions of the initial draft report. For purposes of budgeting, the Contractor shall assume that documentation reports prepared under this Statement of Work will be comparable in length and content to "Standalone Documentation for EPA Base Case 2004 (V.2.1.9) Using the Integrated Planning Model" (September 2005) and "Documentation for EPA Base Case 2006 (v.3.0) using the Integrated Planning Model" (November 2005), which were prepared by EPA and the Contractor following a similar procedure. The Contractor shall assume that the required number of tables, figures, and text will be no more than 20% greater than those prepared for the v.3.0 documentation report. For purposes of budgeting the Contractor shall assume that documentation materials will be required under this Work Assignment for EPA Base v.4.0 and for one additional base case (e.g., the IPM Mexico base case).

Task 8 — Model Size and Speed Assessment and Upgrade

The Contractor shall conduct ongoing assessments of available hardware and software upgrades required to keep model run time under 8 hours for all variants of IPM developed under this Work Assignment including an IPM variant that includes the power and boiler sectors; 7 or more model run years; a full array of generating technologies; emission control retrofits for SO2, NOx, CO2, and Hg; national, multi-national, regional, and state emissions regulations; trading and banking capabilities; and coverage of the entire North American power market (U.S., Canada, and Mexico).

Every three months or as requested by the COR, the Contractor shall identify various hardware and software options that could help meet EPA's proposed run specifications. The Contractor shall also assess each of the identified options with respect to estimated run time provided by the option, time required to implement, start-up and ongoing cost to deploy, and pros and cons of the alternative. Based on the COR's direction, the Contractor shall select an option(s) that could bring run time within the 8-hour limit. The Contractor shall implement and deploy the chosen option with a view to make it operational within 3 months of the choice of the

option.

The Contractor shall also continue to provide technical support in the periodic effort to perform IPM runs on supercomputers at EPA's National Environmental Supercomputer Center or other computing facilities. The effort would involve the Contractor using IPM to generate standard MPS (Mathematical Programming Software) files that can be run on the designated supercomputer. The Contractor shall participate in periodic teleconferences (not to exceed one two-hour teleconference per month) to evaluate supercomputer performance and address problems that may arise. (Note: Performance of this activity is contingent on EPA's establishing the appropriate license agreements with the Supercomputer Center or other facilities.)

Task 9 — Performing Model Runs

The contractor shall perform 30 diagnostic IPM runs in the course of preparing the base cases through the activities described above in Tasks 2-4. For each model run, the Contractor shall provide the COR with run specifications, input (e.g., DAT and EMS files) and output report files (e.g., System Summary Reports, RPT and RPE files)

Task 10 — Parsing Results from Model Runs

For diagnostic purposes, the Contractor shall perform six (6) parsings of IPM run outputs produced under Task 9. The COR will identify the runs and run years to be parsed. The Contractor shall deliver the parsed file within three (3) working days after a request to proceed.

Task 11 — Expert Panels, Work Groups, and Special Studies

The Contractor shall propose nationally and internationally recognized experts beyond the contractor's immediate staff, to develop assumptions for incorporation in EPA Base Case v.5.0 on up to five (5) topic areas to be identified by the COR. Likely topic areas include, but are not limited to the following:

(a) Updating current and, where necessary, developing new coal supply curves and transportation assumptions needed for bottom-up modeling out to 2070
(b) Developing nuclear fuel supply curves needed for modeling out to 2070
(c) Updating current and, where necessary, developing new cost and performance assumptions for electric generation and emission control technologies needed for bottom-up modeling out to 2070.
(d) Using rigorous world macro economic, econometric, or other substantiated methods to derive short-term (5-10 year) and long-term (out to 2070) cost escalation factors for inputs used in EPA Base Case, v.5.0 .

The proposed experts shall have

- demonstrated expertise, 10+ years of professional experience, and recognized standing in the respective topic areas,
- access to data and other information necessary to prepare the inputs required for IPM,
- clearance to publicly release all data and other assumptions used in EPA Base Case v.5.0 and to prepare documentation fully describing data sources and the basis for the assumptions used in the

v.5.0 base case,

- availability to prepare materials and make presentations at expert peer review sessions on assumptions incorporated in Base Case v.5.0.

For each topic area the contractor shall

- Draft technical specifications describing the issues and questions to be addressed by the experts,
- Identify candidates with the requisite expertise.
- Provide the COR with estimates of the cost, level of effort, and delivery schedules for the activities to be performed by outside experts.

EPA will review and determine whether to proceed with the Contractor's proposal. If the decision is to proceed, the Contractor shall put in place the procedures necessary to secure the identified experts and perform the work. In addition, the Contractor shall

- provide technical support to enable EPA to review and provide feedback as the input assumptions are developed
- ensure that all the inputs necessary for IPM are obtained
- obtain data and documentation required for public release and peer review.

Task 12 — Technical Support for Peer Review of IPM

The Contractor shall provide technical support for independent expert review of IPM assumptions, methodology and outputs. Under this work assignment, two peer reviews that were initiate under Work Assignment 4-3(Contract 68-W-03-028) will be completed: (a) IPM model formulation and (b) the coal supply, transportation, and assignment assumptions. In addition, work will be initiated for a peer review of a third technical area to be determined jointly by EPA and the Contractor.

For each of the peer reviews, the Contractor shall prepare and disseminate documents for review, make presentations (approximately 40 slides or overheads each) at one 4-6 hour peer review meeting in Washington, DC or two 2-hour sessions by phone and/or the internet, participate in two 1-2 hour preparatory telephone meetings and two 1-2 hour post-peer-review telephone meetings, collect and summarize comments, and draft a 20-30 page response document. The EPA publication "Peer Review Handbook, 3rd Edition," EPA/100/B-06/002, January 31, 2006 (www.epa.gov/peerreview/pdfs/peer_review_policy_and_memo.pdf) and associated guidance documents shall be used as guidance for this task.

Task 13 — Quality Assurance and Quality Control Activities

Under this task, the Contractor shall report at regular intervals (no less frequently than month) on activities being undertaken to demonstrate adherence to the Quality Assurance Project Plan for EPA Applications of IPM (the "QAPP"). Ten months after the start of this Work Assignment, the Contractor shall provide a 5-10 page technical memorandum documenting all the activities performed during the current work assignment to demonstrate that the procedures and criteria contained in the QAPP are being followed, including quality control procedures for data gathering and analysis and evaluation criteria for data sources and estimation methodologies. QC procedures may include file documentation and data checks, and forms to ensure that

appropriate methodologies and assumptions are used.

Task 14 — Conferences and Comparative Modeling Workshops

The Contractor shall provide one staff member to participate in one conference and in one comparative modeling workshop chosen by the COR. This activity has a twofold purpose: (a) to make presentations on IPM, its inputs, and/or related models (e.g., the natural gas supply model) and (b) to obtain information relevant to updating and improving IPM and related models. The Contractor shall develop one presentation (consisting of approximately 40 slides) for delivery at the conference and another for presentation at the comparative modeling workshop. For purposes of budgeting, the Contractor shall assume that the conference and workshop are each three days in duration and in a location on the U.S. West coast.

The Contractor shall also complete activities begun under Work Assignment 4-3(Contract 68-W-03-028) for the REMAP comparative modeling exercise. Activities shall include preparing up to 2 presentations for REMAP meetings and performing 1-2 additional model runs (if EPA receives such a request from REMAP organizers).

IV. DELIVERABLES

Note: All electronic deliverables required under this work assignment shall be emailed to the WAM and/or posted on the contractor's FTP site for downloading. The contractor shall also provide electronic versions of all deliverables on CD-ROM disks at the conclusion of the work assignment. The disk(s) will be accompanied by a hardcopy index of all items contained on the disk(s).

Task 1: Work Plan - in accordance with clauses B.2 and Attachment 1 of the contract

Task 2: Design, programming, testing and implementation of selected updates and enhancements of IPM

Six (6-8) 5-15 page issue papers	3 weeks from request to proceed
Input and output files from six (6-8) diagnostic runs	4 weeks from request to proceed
NEEDS Comment Tracking Tool - Round 1 Revision	4 weeks from request to proceed
NEEDS Comment Tracking Tool - Round 2 Revision	4 weeks from request to proceed

Task 3: Model Enhancements to Support Analysis of New Environmental Initiatives

One (3-5) 10-20 page technical memorandum	3 weeks from request to proceed
Input and output files from 3-5 diagnostic runs	4 weeks from request to proceed
Specifications and sample data files	2 weeks from request to proceed

for information exchange with NREL

Task 4: Reporting Improvements

3 draft reporting improvement prototypes	5 weeks from request to proceed
3 operational reporting improvement prototypes	8 weeks after obtaining feedback on draft prototypes
Input and output files from previously performed IPM runs (to be used in EPA's research.on advanced decision making tools).	1 week from request to proceed
5-10 model runs and accompanying data files for testing data exchange and coordinated modeling with IPM and NEMS	1 week from request to proceed for each trial run

Task 5: Parsing Tool Improvements

Two (2) 5-10 page technical memoranda. (One covering improvements to the parsing tool; the other covering enhancements to the Streamlining Tool.)	4 weeks from request to proceed
Parsed output files from two (2) diagnostic runs	4 weeks from request to proceed
Two (2) draft and one (1) final output files from revised Streamlining tool	6, 8, and 10 weeks from request to proceed respectively

Task 6: Validation and Uncertainty Evaluations

Input and output files from validation runs	4 weeks from EPA approval of validation proposal
One (1) technical memorandum (5-15 pages) summarizing results of validation	3 weeks from completion validation runs

Task 7: Documentation

Revisions to v3.0 documentation materials	1 week from request to proceed

(Note: The following four activities will be repeated for each of the two (2) documentation reports required under this work assignment: for EPA Base Case v4.0 and for one other base case, e.g., IPM Mexico.)

Draft outline of report and appendices	2 weeks from request to proceed

Final outline of report and appendices	2 weeks after receiving feedback on draft outline
5-15 page technical memorandum on new and revised assumptions and how they will be documented	2 weeks from request to proceed
Tables, figures and limited text for documentation report	Ongoing for 6-12 weeks after finalizing outline
First and second mark-ups of draft documentation report	2 weeks from receipt of each draft report

Task 8: Model Size and Speed Assessment and Upgrade

Telephone briefings on available options	Every 3 months by phone as part of Architecture Status meetings
Implementation of size and speed improvements.	Every six (6) months

Task 9: Performing Model Runs

Specification for each of thirty (30) runs	One (1) day from request to proceed
Input and output files and updated run log for each of thirty (30) model runs	Three (3) days from request to proceed

Task 10: Parsing results from model runs

Spreadsheet files containing fully quality assured, parsed results for 6 parsings of IPM output files	3 days after request to proceed

Task 11: Expert Panels, Work Groups, and Special Studies

The following shall be prepare for up to 5 technical topic areas;

Draft and final technical specifications on issues and questions to be addressed by experts	3 weeks from request to proceed
List of candidates with required expertise	3 weeks from request to proceed
Estimate of cost, level of effort, and delivery schedule	3 weeks from request to proceed
Data and other information required for incorporation in IPM	4 weeks from request to proceed
Data and documentation required for public release and peer review	6 weeks from request to proceed

Task 12: Technical Support for Peer Review of IPM

Three (3) presentations (approximately 40 slides or overheads each)	3 weeks from request to proceed
Three (3) summaries of comments (10-20 page each)	1 week after each peer review meeting
Three (3) response documents (20-30 page each)	2 weeks after each peer review meeting

Task 13: Quality Assurance and Control Activities

Summary of QA/QC activities performed	Monthly by phone as part of Architecture Status meetings
5-15 page technical memorandum	10 months from inception of this Work Assignment

Task 14: Conferences and Comparative Modeling Workshops

Two (2) presentations (each consisting of approximately 40 slides)	3 weeks after request to proceed
Three (3) 1-2 page response to questions on previously performed model runs	3 working days from request to proceed
1-2 addition model runs	1 week from request to proceed

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

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EP-W-08-018	Base X Option Period Number	IPM Architecture Maintenance and Enhancement

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	All

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 03/28/08 To: 03/10/09

Comments:
The purpose of this amendment is to approve the workplan.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 8)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
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Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	4,400
This Action	$499,287.00	0
Total	$499,287.00	4,400

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 04/18/08	Cost/Fee: $499,287.00	LOE: 4,400
Cumulative Approved:	Cost/Fee: $499,287.00	LOE: 4,400

Work Assignment Manager Name ELLIOT R. LIEBERMAN (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202.343.9136 Fax Number 202.343.2359
Project Officer Name (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564.9699 Fax Number 202.565.2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 5-7-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number (202)564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		IPM Architecture Maintenance and Enhancement
Period of Performance:	From:	03/28/08
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Total Funding:		

WA Totals

The following item(s) have been added:

Category	POP	Amount
Estimated Cost	Base Pd.	$499,287.00

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-1

[ ] Original [X] Amendment Number: 2

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	IPM Architecture Maintenance and Enhancement

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	All

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 03/28/08 To: 03/10/09

Comments:
ICF's 4/18/08 workplan indicated that the estimated LOE would not be sufficient to complete the SOW; however, ICF did not provide the estimate of LOE that would be sufficient. This amendment provides additional LOE to support several of the tasks. The Contractor shall provide a revised workplan that addresses the entire SOW and indicates total LOE/Estimated Costs.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
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Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$499,287.00	4,400
This Action	$0.00	3,450
Total	$499,287.00	7,850

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $499,287.00	LOE: 7,850

Work Assignment Manager Name ELLIOT R. LIEBERMAN (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202.343.9136 Fax Number 202.343.2359
Project Officer Name (Signature) (Date)	Branch/Mail Code 3803R Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 7-24-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number (202)564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		IPM Architecture Maintenance and Enhancement
Period of Performance:	From:	03/28/08
	To:	03/10/09
Award Date:		03/28/08
Total Funding:		

Attachments

The following item(s) have been added:

Attachment Name
Additional LOE allocation

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 4400 to 7850.

Additional LOE allocati

Contract: EP-W-08-018, Work Assignment: 0-1, Amendment: 0002

2500 LOE is allocated to cover activities under Tasks 2 and 3 to specifically support updates and enhancements related to fuel supply and greenhouse gas modeling.

950 LOE is allocated to cover related activities under Tasks 7, 9, 10, 12, and 13.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-1

[ ] Original [X] Amendment Number: 3

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	IPM Architecture Maintenance and Enhancement

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	All

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 03/28/08 To: 03/10/09

Comments:
The contractor shall not incur costs greater than $944,199 nor LOE greater than 7850 unless expressly authorized in an amendment.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 8)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$499,287.00	7,850
This Action	$444,912.00	0
Total	$944,199.00	7,850

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 08/14/08	Cost/Fee: $444,912.00	LOE: 3,450
Cumulative Approved:	Cost/Fee: $944,199.00	LOE: 7,850

Work Assignment Manager Name ELLIOT R. LIEBERMAN (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202.343.9136 Fax Number 202.343.2359
Project Officer Name (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564. Fax Number 202.565.2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 8-29-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number (202)564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title)	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		IPM Architecture Maintenance and Enhancement
Period of Performance:	From:	03/28/08
	To:	03/10/09
Award Date:		03/28/08
Total Funding:		

WA Totals

The following item(s) have been modified:

Category	POP	From	By	To
Estimated Cost	Base Pd.	$499,287.00	$444,912.00	$944,199.00

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-1

[] Original [X] Amendment Number: 4

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	IPM Architecture Maintenance and Enhancement

Contractor	Specify Section and Paragraph of Contract SOW
CF SERVICES COMPANY, L.L.C.	All

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out [X] Work Assignment Amendment [] Incremental Funding [] Work Plan Approval

Periods of Performance: From: 03/28/08 To: 03/10/09

Comments:
Incremental LOE and funding is provided to support workplan dated 8/14/08. The contractor shall not exceed these ceilings unless explicitly authorized in an amendment.

[] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$944,199.00	7,850
This Action	$250,000.00	1,940
Total	$1,194,199.00	9,790

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 08/14/08	Cost/Fee: $1,194,199.00	LOE: 9,790
Cumulative Approved:	Cost/Fee: $1,194,199.00	LOE: 9,790

Work Assignment Manager Name: ELLIOT R. LIEBERMAN	Branch/Mail Code: 6204J
(Signature) (Date)	Phone Number: 202.343.9136
	Fax Number: 202.343.2359
Project Officer Name:	Branch/Mail Code: 3803R
(Signature) (Date)	Phone Number: 202.564.
	Fax Number: 202.565.2554
Other Agency Official Name:	Branch/Mail Code:
(Signature) (Date)	Phone Number:
	Fax Number:
Contracting Official Name: DEBRA A. MILLER	Branch/Mail Code: 3803R
(Signature) Debra A Miller 10-27-08 (Date)	Phone Number: (202)564-1041
	Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title)	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		IPM Architecture Maintenance and Enhancement
Period of Performance:	From:	03/28/08
	To:	03/10/09
Award Date:		03/28/08
Total Funding:		

WA Totals

The following item(s) have been modified:

Category	POP	From	By	To
Estimated Cost	Base Pd.	$944,199.00	$250,000.00	$1,194,199.00

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 7850 to 9790.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-2

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/09/08 To: 03/10/09

Comments:
The contractor shall provide a workplan in accordance with the contract.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	410

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 410

Work Assignment Manager Name: ERIKA J. WILSON	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Project Officer Name	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Other Agency Official Name	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Contracting Official Name: DEBRA A. MILLER	Branch/Mail Code 3803R
(Signature) Debra A Miller 4-8-08 (Date)	Phone Number 202-564-1041
	Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title: Communications Support for clean Air Markets Div.
Period of Performance: From: 04/09/08
To: 03/10/09
Award Date:
Total Funding:

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: ERIKA J. WILSON
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number:
Fax Number:
E-Mail Address: wilson.erika@epa.gov

Attachments

Attachment Name

Communications Support for CAMD

BACKGROUND AND SCOPE OF WORK

The Clean Air Markets Division (CAMD) is responsible for developing, implementing and assessing market-based programs to reduce emissions and improve air quality. Both the Division and the cap and trade programs it operates, including the Acid Rain Program and NOx Budget Program, are widely acknowledged as extremely successful and efficient. The Acid Rain Program has served as a model for numerous subsequent efforts to cost-effectively address regional scale environmental problems caused by air emissions in the U.S. and around the world. The program has resulted in significant, broad-based human health and environmental benefits.

As cap and trade programs grow in number and in scope, promoting the underpinnings of successful programs – transparency, accuracy, monitoring, analytical assessment – of both new and existing programs remains critical. Also critical is expanded and diversified communications of results and projected benefits.

In 2005, the Administration promulgated rules that include cap and trade approaches to further reduce emissions from the electric power and related sectors. The Clean Air Interstate Rule (CAIR) would lower the existing SO2 cap under the Acid Rain Program by two-thirds, expand current NOx reductions and reduce and cap mercury emissions. The unprecedented scope of the cap and trade program under these rules requires new analysis, development and evaluation of assessment efforts, and outreach and education on how and why cap and trade programs deliver environmental results, as well as numerous other benefits. It is likely that cap and trade programs will be a part of a regulatory picture for reducing other pollutants such those contributing to global climate change, further enforcing the need for more outreach regarding appropriate applications of this important policy tool.

CAMD's charge to assess as well as implement cap and trade programs requires it to further develop and refine assessment criteria, building consensus among interagency and non-governmental entities, and applying evolving scientific expertise.

The Division has developed and used its program compliance reports and related cap and trade outreach materials to educate policy makers, stakeholders and news makers at the national and state levels and special interest or stakeholder groups, as well as the general public, however the expanded application of the cap and trade mechanism in recent rulemakings and proposed policies, as well as recent assessments of existing programs, require the Division to continue its outreach and education efforts to a range of interest groups. Further education is critical even with those audience members who are familiar with the program.

The Division is also responding to directives to the agency from scientific advisory boards and the National Academy of Sciences in particular to expand the agency's capacity to assess ecological outcomes of air programs and will therefore look to showcase its data and assessment capacity through a variety of media – print, Internet, and other means. These directives will require re-packaging and dissemination of CAMD's considerable monitoring, modeling, and assessment data into media suitable to broad-based outreach, including but not limited to stakeholder meetings, presentations, printed materials, and online resources.

TECHNICAL APPROACH

Task 1: Work Plan and Work Assignment Management

Under this task, the Contractor shall prepare the work plan and cost estimate for this work assignment which includes the approach, resources, schedule, and estimated budget for the tasks below. In addition, the Contractor shall conduct all activities necessary to manage the work assignment, including preparing monthly progress reports, conducting financial reporting, and communicating with the EPA Work Assignment Contracting Officer's Representative (COR) to discuss progress and direction under the work assignment.

Task 2: Communications, Outreach, Design, Graphics

The Contractor shall design and prepare information materials, including fact sheets, technical materials and guidance documents (written, audio-visual, and electronic materials). Prepare graphics, draft presentations, and reports. Provide graphic, editorial and report drafting support for technical documents, and where appropriate support with technical expertise. Such support may include technical writing and communication of technical, economic, scientific, and other information.

The Contractor shall provide support for the editing, layout and development of communications products, specifically, topical fact sheets, posters and similar publications reflecting division activities. The Contractor will also provide a pdf format for website posting. For budgeting purposes, assume between two and five fact sheets that will use consistent design elements. Production may require acquisition of stock images.

Task 3: Facilitation for Technical Workshops and Outreach Event Support

Provide facilitation, logistical, and other support functions for meetings, conferences, hearings, workshops, and seminars. Activities include securing facilities, assisting in preparing agendas, taking notes, developing presentations, supplying, setting up, and running audio/video equipment, conducting registration, copying and distributing handouts, and preparing the presentation materials and answers to questions asked during the events, and making such materials ready for posting on EPA websites. Meeting topics will include assessment approaches (e.g., critical loads), indicator development and tracking, and environmental monitoring (e.g., atmospheric concentration and deposition, aquatic and terrestrial chemistry, biological change) to track and evaluate environmental and human health response to emissions reductions of NOx, SO2, mercury, and their byproducts.

The Contractor shall convene up to three technical workshops and/or stakeholder meetings as a function of implementing elements of CAMD's regulatory implementation and ecological assessment work. The date and location of other workshops will be specified by EPA through technical direction.

Deliverables/Schedule

Milestones	Delivery Schedule
Task 1	
Work Plan	**Due date: within three weeks of receipt of WA**

Monthly Progress Reports	**within 15 days of the end of the monthly reporting period**
Task 2	
design/layout and production of fact sheets and technical materials	**At WAM direction; within timeframe to serve workshops under Task 3, specifically.**
Task 3	
Mercury workshop	**Planning/support in April 08; facilitation at workshop in May 08; follow-on activities/report TBD at WAM direction**
Technical workshops (follow-on activities)	**At WAM direction, Fall 08**

EPA

Unite[redacted]s Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assi[redacted]nt Number
0-2

[] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor
ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out [X] Work Assignment Amendment [] Incremental Funding [] Work Plan Approval

Periods of Performance
From: 04/09/08 To: 03/10/09

Comments:
The purpose of this amendment is to change the COR.

[] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount	(Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1											
2											
3											
4											
5											

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	410
This Action	$0.00	0
Total	$0.00	410

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 410

Work Assignment Manager Name
JAMES O. LEE
(Signature) (Date)
Branch/Mail Code
Phone Number (202)343-9723
Fax Number

Project Officer Name
ANDREA L. BRUNSMAN
(Signature) (Date)
Branch/Mail Code 3803R
Phone Number 202.564.9699
Fax Number 202.565.2554

Other Agency Official Name
(Signature) (Date)
Branch/Mail Code
Phone Number
Fax Number

Contracting Official Name
DEBRA A. MILLER
(Signature) Debra A Miller 4-29-08 (Date)
Branch/Mail Code 3803R
Phone Number 202-564-1041
Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*

Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Communications Support for clean Air Markets Div.
Period of Performance:	From:	04/09/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

Procurement Management Roles

The following item(s) have been modified:

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: ERIKA J. WILSON
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Date Role Ended: 04/29/08

Mail Code:
Phone Number:
Fax Number:
E-Mail Address: wilson.erika@epa.gov

The following item(s) have been added:

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: JAMES O. LEE
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number: (202)343-9723
Fax Number:
E-Mail Address: lee.jameso@epa.gov

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-2

[ ] Original [X] Amendment Number: 2

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 04/09/08 To: 03/10/09

Comments:
The purpose of this amendment is to approve the workplan and upward adjust the LOE allocated to this work assignment.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 8)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	410
This Action	$0.00	126
Total	$0.00	536

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 04/29/08	Cost/Fee: $105,497.00	LOE: 536
Cumulative Approved:	Cost/Fee: $0.00	LOE: 536

Work Assignment Manager Name: JAMES O. LEE
(Signature) (Date)
Branch/Mail Code:
Phone Number: (202)343-9723
Fax Number:

Project Officer Name: ANDREA L. BRUNSMAN
(Signature) (Date)
Branch/Mail Code: 3803R
Phone Number: 202.564.9699
Fax Number: 202.565.2554

Other Agency Official Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Contracting Official Name: DEBRA A. MILLER
(Signature) Debra A. Miller 6-20-08 (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564-1041
Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*
Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Communications Support for clean Air Markets Div.
Period of Performance:	From:	04/09/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 410 to 536.

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-2

[ ] Original [X] Amendment Number: 3

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From 04/09/08 To 03/10/09

Comments:
The purpose of this amendment is to provide additional LOE at the contractor's request, which will be performed within the current approved cost ceiling to this work assignment.

[ ] Superfund **Accounting and Appropriations Data** [X] Non-Superfund

Line	DC (Max 9)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$105,497.00	536
This Action	$ -0-	120
Total	$105,497.00	656

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee:	LOE:
Cumulative Approved	Cost/Fee: $105,497.00	LOE: 656

Work Assignment Manager Name: JAMES O. LEE (Signature) 11/8/07 (Date)
Branch/Mail Code:
Phone Number: (202)343-9723
Fax Number:

Project Officer Name:
(Signature) (Date)
Branch/Mail Code: 3803R
Phone Number: 202.564.
Fax Number: 202.565.2554

Other Agency Official Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Contracting Official Name: DEBRA A. MILLER (Signature) 11-6-08 (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564-1041
Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title):
Date:

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Communications Support for clean Air Markets Div.
Period of Performance:	From:	04/09/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

WA Totals

The following item(s) have been added:

Category	POP	Amount
Estimated Cost	Base Pd.	(b)(4)
Fixed Fee	Base Pd.	

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 536 to 656.

EPA

Unit [redacted]es Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work As[redacted]nt Number
0-2

[ ] Original [X] Amendment Number: 4

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	

Purpose:
[ ] Work Assignment Initiation [ ] Work Assignment Close-Out
[X] Work Assignment Amendment [ ] Incremental Funding
[X] Work Plan Approval

Periods of Performance
From: 04/09/08 To: 03/10/09

Comments:
This amendment is issued to raise the total LOE from 656 to 826. The contractor shall provide their revised workplan and incremental budget which prices out their ODCs.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$105,497.00	656
This Action	$0.00	170
Total	$105,497.00	826

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE: 826
Cumulative Approved: 02/28/09	Cost/Fee: $105,497.00	LOE: 826

Work Assignment Manager Name JAMES O. LEE (Signature) (Date)	Branch/Mail Code Phone Number (202)343-9723 Fax Number
Project Officer Name SHERMAN E. FARVES (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564.2185 Fax Number 202.565.2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name RACHEL SCHWARTZ (Signature) 2/19/09 (Date)	Branch/Mail Code 3803R Phone Number 202-564-1053 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Communications Support for clean Air Markets Div.
Period of Performance:	From:	04/09/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

Procurement Management Roles

The following item(s) have been modified:

CONTRACT SPECIALIST:

U.S. E.P.A.
Attn: SHERMAN E. FARVES
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 3803R
Phone Number: 202.564.9699
Fax Number: 202.565.2563
E-Mail Address: farves.sherman@epa.gov

PROJECT OFFICER:

U.S. E.P.A.
Attn: SHERMAN E. FARVES
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 3803R
Phone Number: 202.564.2185
Fax Number: 202.565.2554
E-Mail Address: farves.sherman@epa.gov

ADMINISTRATIVE CONTRACTING OFFICER:

U.S. E.P.A.
Attn: SHELBY N. SCHULLER
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 3803R
Phone Number: 202-564-0966
Fax Number:
E-Mail Address: schuller.shelby@epa.gov

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 656 to 826.

This work assignment is now Incrementally Funded.

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-2

[] Original [X] Amendment Number: 5

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Communications Support for clean Air Markets Div.

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out [X] Work Assignment Amendment [] Incremental Funding [] Work Plan Approval

Periods of Performance: From: 04/09/08 To: 03/10/09

Comments:
The purpose of this amendment is to place an additional requirement under the Statement of Work - Task 3 "'Workshop Report Writing"

[] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$105,497.00	826
This Action	$0.00	0
Total	$105,497.00	826

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $105,497.00	LOE: 826

Work Assignment Manager Name: JAMES O. LEE (Signature) (Date)	Branch/Mail Code Phone Number (202)343-9723 Fax Number
Project Officer Name: SHERMAN E. FARVES (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202.564.2185 Fax Number 202.565.2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name: DEBRA A. MILLER (Signature) Debra A. Miller 2-26-09 (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Communications Support for clean Air Markets Div.
Period of Performance:	From:	04/09/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

Attachments

The following item(s) have been modified:

The Description for Communications Support for CAMD has been modified.

The following item(s) have been added:

Attachment Name
addition to SOW

Task 3: Workshop Report Writing

The following is an additional requirement under the task:

The contractor shall produce and deliver a camera-ready copy of the report in electronic media and two color copies by technical direction from the COR.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-3

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	A through I

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/07/08 To: 03/10/09

Comments:
The contractor shall prepare and delivery a workplan in accordance with the contract.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 6)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee	LOE
Contract Period: Previously Approved		
This Action		
Total	$0.00	9,000

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 9,000

Work Assignment Manager Name MURAT KAVLAK (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202-343-9634 Fax Number 202-343-2359
Project Officer Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 4-3-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contract: EP-W-08-018, Work Assignment: 0-3

Summary Information

Title:		TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES
Period of Performance:	From:	04/07/08
	To:	03/10/09
Award Date:		
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
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ALTERNATE WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: GENE-HUA SUN
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

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Phone Number: 202-343-9119
Fax Number: 202-343-2359
E-Mail Address: sun.gene-hue@epa.gov

Attachments

Attachment Name
Technical Support for CAMD Regulatory Development Activities

I. BACKGROUND AND PURPOSE

The contractor shall use the developed "Integrated Planning Model (IPM) Version 3.0, 3.01 and 3.1 or later to support the CAMD regulatory development activities by estimating the operational costs, emission reductions, and providing the technical analyses for the economic impacts to the electric power generating sector and users for current regulatory development under the multiple pollutant control strategy. Activities covered in this work assignment include modeling, analyses, and assessment in support of policy development, rulemaking, and impact evaluations related to power generation and other stationary sources, energy consumption, and the pollutants associated with the power sector and other stationary sources, including sulfur dioxide (SO2), nitrogen oxides (NOx), particulate matter (PM2.5), mercury (Hg), and other toxic air pollutants as well as emissions of carbon dioxide (CO2) and other greenhouse gases. Activities may be related to the Clean Air Interstate Rule (CAIR), Clean Air Mercury Rule (CAMR), New Source Performance Standards (NSPS), New Source Review (NSR), Maximum Achievable Control Technology (MACT), or other regulatory actions, policy development, or legislative proposals."

Additionally, regulatory support activities also include work related to air quality improvement (NAAQS Review, State Implementation Plans (SIPs), air toxics (MACT reviews), and greenhouse gases (e.g., Federal voluntary programs to lower GHGs and development of cleaner technology, while States begin to address GHGs (e.g. RGGI, California, etc.) and Congress considers legislation (e.g., implementation of mandatory emissions reporting, Senate and House developing comprehensive legislation, etc.)).

On March 10, 2005, the Administrator signed the final Clean Air Interstate Rule (CAIR), a rule that will ensure that Americans continue to breathe cleaner air by dramatically reducing air pollution that moves across state boundaries in 28 eastern states. By 2015, CAIR will provide health and environmental benefits valued at over 25 times the cost of compliance, and those benefits will continue to grow.

CAIR will permanently cap emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) in the eastern United States. When fully implemented, CAIR will reduce SO_2 emissions in 28 eastern states and the District of Columbia by over 70 percent and NO_x emissions by over 60 percent from 2003 levels. This will result in more than $100 billion in health and visibility benefits per year by 2015 and will substantially reduce premature mortality in the eastern United States, and these benefits will continue to grow each year with further implementation.

Following promulgation of the final rule in March 2005, on June 21, 2005, in support of the proposal to include New Jersey and Delaware in the CAIR region for purposes of controlling fine particle pollution in downwind states, EPA issued a notice to announce the availability of modeling data which was designed to ensure emissions reductions required under CAIR are achieved. In this notice, EPA also extended the comment period for the NJ and DE proposal so that is aligns with the comment period for this new data.

EPA proposed a federal implementation plan (FIP) on August 1, 2005 (which was finalized on March 15, 2006) to require power plants in CAIR states to participate in one or more of three separate cap and trade programs. EPA also proposed it respond to a North Carolina petition that requested the Agency to require emission reductions in several upwind states.

In addition, the EPA Administrator received eleven petitions for reconsideration. While the Agency does not believe that the final decision was in error, on November 22, 2005 EPA granted the reconsideration and provided an additional opportunity for public comment on issues related to the final rule, including: (1) claims that inequities resulted from applying the sulfur dioxide allocation methodology that states choosing to

participate in the CAIR SO_2 trading program would use to allocate SO_2 emissions allowances to sources; (2) EPA's use of fuel adjustment factors (1.0 for coal, 0.6 for oil, and 0.4 for gas) in establishing state nitrogen oxides (NO_x) budgets; (3) certain inputs to the fine particle ($PM_{2.5}$) modeling used to determine Minnesota's inclusion in the CAIR region for $PM_{2.5}$; and (4) EPA's determination that Florida should be included in the CAIR region.

On December 22, 2005, EPA decided to add an additional aspect to the reconsideration of the CAIR. This involved the examination the impact of a recent D.C. Circuit Court decision (N.Y. v. EPA, 413 F.3d 3 (D.C. Cir. 2005) on analyses used in developing CAIR. This decision vacated the pollution control project (PCP) exclusion in the New Source Review (NSR) regulation. The exclusion allowed for certain environmentally beneficial PCPs to be excluded from certain NSR requirements. Even EPA's analysis shows that the court decision does not impact the CAIR analyses, EPA decided to provide an opportunity for public comment on the issue and did not propose any changes to CAIR at that time. The final rule for CAIR Reconsideration was signed on April 28, 2006.

Regarding mercury emission reductions, on March 15, 2005, EPA issued the first regulation in the world to regulate mercury emissions from coal-fired power plants. This rule creates a market-based cap-and-trade program that will permanently cap utility mercury emissions in two phases: (1) The first phase of the rule sets a cap of 38 tons and is projected to reduce emissions from 48 tons to 31 tons beginning in 2010, and (2) Emissions will continue to decline thereafter until they are reduced to the second phase cap of 15 tons when the program is fully implemented. The mandatory declining caps, coupled with significant penalties for noncompliance, will ensure that mercury reduction requirements are achieved and sustained.

Following promulgation of the final rules, the EPA Administrator received four petitions for reconsideration. The CAMR reconsideration, announced on October 21, 2005 agreed to reconsider seven aspects of the CAMR final rules, such as the method used to apportion the national caps to individual states; the definitions of "designated pollutant; :.., etc.. CAMD may work in conjunction with other EPA offices (e.g., OAQPS) in development of other mercury emission reduction programs.

In the past, air emissions from the power sector were regulated one pollutant at a time and the regulations were developed under various authorities. Industry has developed and implemented control technologies in incremental steps to mitigate emissions of SO_2, NO_x, particulate matter, and other pollutants, as driven by air pollution policies and regulations. Experience with the interactive effects of previous regulatory approaches, a better understanding of control technology synergies, growing knowledge about the co-benefits of controlling various combinations of pollutants, as well as the growing concern over the continuing environmental impacts of the power generating sector have lead to proposals for integrated approaches to control air emissions from the power generating sector. Most of these integrated approaches include the control of SO_2, NO_x and Hg emissions. Some of the multi-pollutant control technologies have reached a stage of development beyond pilot scale. Included are those technologies that integrate during- and/or post-combustion controls of at least two of the SO_2, NO_x, mercury pollutants, and CO_2 emissions, either in one process or a combination of coordinated and complementary processes. Some of the new coal-fired electricity-generating technologies, which are inherently more efficient than conventional coal-fired power plants, have the potential to generate lower emission of air pollutants and CO_2.

Under this work assignment, the contractor shall implement the technical support effort from Contract # EP-W-08-018 to:

(1) Provide the technical and economic studies under the criteria established by the Work

Assignment Contract Officer's Representative (WACOR) and CAMD technical staff to support routine EPA rule making processes;

(2) Evaluate the operational cost and effects among the installed Air Pollutants Control Devices (APCDs), combustor efficiency improvement and its co-benefits on CO_2 reductions, and economic impacts under proposed multi-pollutant reduction rules for fossil fuel fired electric generating units;

(3) Assess the feasibility and reliability of installing air pollution control technologies for proposed rules in the electric power generating sector under given time frames;

(4) Assess the uncertainties associated with major parameters used in the IPM model to support CAMD regulatory development activities; and

(5) Assist the administration in preparing white papers and Microsoft Power Point related slide presentations in answering Congressional and inter-agency demand and public comments related to the products generated from this work assignment.

II. CONTRACT LEVEL STATEMENT OF WORK REFERENCE

The tasks to be performed under this work assignment are consistent with the areas of analyses authorized in sections A through I of the contract's Statement of Work:

III. STATEMENT OF WORK TASKS

TASK 1: Prepare Work Plan

The Contractor shall prepare a Work Plan for 9,000 hours in accordance with the contract. Deliverables shall be completed and submitted to EPA/OAR/OAP/CAMD as specified in this work assignment and through written technical direction. The contractor can use the results obtained from, but not duplicate services provided under, several work assignments from the previous contract.

The contractor shall expect to provide ad-hoc responses for not more than 30% of the LOE involvement. The contractor shall realize that the allocation of effort required under each work area under this work assignment may vary during actual performance. The contractor shall closely work with the WACOR through the course of this work assignment to ensure the best of use of LOE under limited funds available. The contractor shall notify the WACOR when 90% of the work assignment hours or approved funding level has been accumulated in contractor's accounting system. **Funding of this work assignment will be incremental. At no time shall the contractor incur costs greater than the funds allocated to this work assignment.**

TASK 2: Regulation Compliance Costs Analysis to support CAMD/PDB for various Rule Making Processes

The Contractor shall use the Integrated Planning Model (IPM) version 3.0, 3.01 and 3.1 to estimate the national, regional and state compliance costs for the emission reductions established through various multipollutant reduction regulations as specified in the background section. The Agency estimates from 30 to 90 IPM runs will

be needed to support one year of the CAMD rule making procedures under this work assignment. The contractor shall expect to parse 25 % of these runs for detailed boiler level information to support EPA's technical studies. The WACOR will issue written requests for runs which need to be parsed when specific needs have been identified. EPA estimates 12 to 60 IPM runs will be used to address the following specific areas:

1. Routine studies: Based on the emission caps established in different regulations and the newly available control cost information acquired during the course of this work assignment, CAMD will need specific IPM runs (e.g. under IPM version 3.0 and 3.1 depending on the purpose of the study and the reference base case used for that study) to support CAMD technical studies in order to address issues related to policy development, economic impact assessment, interrogatories from inter- and/or intra-agency effort in rule development, responses to comments from Congressional committees and/or other environmental organizations, and the litigation of the regulations involved with CAMD regulatory development activities, (e.g., CAIR and/or CAMR and its Reconsideration(s)). The Agency also needs to conduct sensitivity, reliability, and feasibility studies for the electric power generating system in installing and/or retrofitting air pollution control devices available in the market for the electric power generating industry to use in compliance with air pollutant reduction regulations. The WACOR estimates that 30 IPM runs under this work assignment will be needed to address these routine studies. For routine analyses, the contractor shall deliver the study results from these IPM runs to the agency three weeks after receiving the written notice from the WACOR. The contractor shall expect that 30% of these routine IPM runs will be issued in an ad-hoc manner. Results from ad-hoc runs should be delivered to the WACOR within three days after receiving the WACOR's written requests.
For each IPM run, the WACOR will work with CAMD technical staff to determine the input data criteria (i.e., allowable options, limiting parameters, reference base case or policy cases identification, emission caps, and specific constrains) for each IPM model run. These criteria and parameters will be generated based on: (1) The economic analyses needed to examine regulatory options, (2) Comments which the Agency received during the course of this work assignment, or (3) New information received during the CAIR and/or CAMR litigation processes. The contractor shall summarize and present to the WACOR the run specification by Excel style spreadsheet before each IPM run. Upon receiving the approval from the WACOR, the contractor shall perform these IPM runs. The contractor shall deliver results in the electronic and/or hard copy format according to the deliverable schedules specified in the WACOR's written request for the ad-hoc runs. For non-ad-hoc IPM runs, deliverables shall be delivered as specified in the deliverables schedules attached at the end of this Statement of Work.

2. Specific studies to support and/or to revise may include "Financial Analysis," "Potential Impacts Upon Employment in Other Economic Sectors," "Continuing Support in the Implementation of the National Energy Policy," "Support for Response to Congressional Requests," and "Analysis of Impacts of Carbon Regulations." Details of these analyses will be discussed in Task 3. The WACOR estimates that 30% of the IPM runs effort will be used in this category.

3. Studies to support "Analysis of Allowance Allocation Options". More detail of these runs will be discussed in Task 6. The WACOR estimates that 20 % of the IPM runs will be used to support this category.

4. Potentially 1-12 studies will be required, in which the contractor shall analyze nuclear generation as it relates to overall electric generation. Analysis may include examining the economics of nuclear power generation, costs associated with nuclear re-licensing and/or life extension, and cost and performance of

new nuclear generation.

5. Analyses to provide technical support for complimentary rulemakings for the power sector, including the litigation of the CAIR Reconsideration, any possible mercury legislation (which might be related to CAMR or MACT), Best Available Retrofit Technology (BART), and Maximum Achievable Control Technology (MACT) rule would affect such rule development and/or proposed legislation. The remaining portion of IPM runs will be used to support items 4 and 5 of this task.

For items 2 through 5, the WACOR will work with the CAMD technical staff to determine the allowable options and limiting parameters for each of the IPM model analyses. These options and parameters will also be generated based on: (1) The economic analyses needed to examine the regulatory option, (2) The specific studies generated from the Congressional request, or (3) Specific benefit analyses required for RIA. The WACOR will issue a written request to the contractor to specify these criteria and deliverable schedule. The contractor shall perform these IPM runs and deliver the results (i.e., electronic and/or hard copy) to the WACOR as specified in the written request. Other deliverable items not specified in the WACOR's written request shall be delivered as specified in the deliverables schedule attached at the end of this Statement of Work.

TASK 3: Technical Analyses and Documents Preparation for Regulatory Impact Analyses Related Rulemaking Processes

In order to continue the support of the multi-pollutant reduction rule making efforts under CAIR, CAIR Litigation, any mercury rulemaking activities (that may include revisiting aspects of CAMR), NSR, Section 812 for the Title IV of the CAAA and/or CAIR, NSR settlements, NSPS, the Geological Sequestration Rule, and the GHG Inventory Rulemaking, the following technical analyses and documentation preparation may be required by the rule making processes:

1. Financial Analyses: in this area, when needed, the WACOR will issue a written request for the contractor to enhance the financial analyses originally developed by ICF in the previous contract (and subsequent work assignment(s)). The enhancement shall include the findings and specific data obtained in new IPM runs for the case studies specified in Task 2 of this Statement of Work. Topics which need to be updated include power plant economic and viability issues, market efficiency studies, and financial distress analyses. The financial analyses shall include the IPM run results which address the results from assumptions of different emissions control levels, alternative control performance, alternative fuel cost, projection of the types of new power plants on line, and alternative financial assumptions. The relationship developed between these new IPM runs and financial studies shall help the Government to determine the potential impacts on retail electricity prices, coal production, employment, and electricity generation at the State, regional and national levels. The contractor shall also provide the results of these studies to help the Agency to determine the financial impacts of the Best Available Retrofit Technology (BART) and Maximum Achievable Control Technology (MACT) to the rule development activities currently in progress.

2. Regarding the feasibility of installing air pollution control technologies, the contractor shall examine the time needed to install controls and the impact on electric reliability. The contractor shall assist the Agency to identify the control technology installations needed to meet the various emission cap levels for SO_2, NO_x and mercury by the expected time frame. Analysis shall examine the affects on the power utility sector reliability and boiler outage period for the installation of control technologies. Such efforts

would assist CAMD in analyzing and assessing NOx, SO2, and mercury emission control science/testing and their respective parametric cost and performance. After receiving the WACOR's written request, the contractor shall provide the WACOR with the essential information to identify the hot spots (e.g. regions in the country which are projected to have higher percentages of control technology installations) and the time frame required for electrical power generation sector to install or retrofit these control technologies.

3. In the support of activities such as the response to Congressional, OMB, inter- or intra-agency requests, and comments received during the public comment periods, the contractor shall provide ad-hoc technical analyses to support the EPA in preparation documentation to respond to Congressional, OMB, and inter- or intra-agency requests for technical evaluation of information. In addition to using the IPM model (e.g. both version 3.0 and 3.1 depending to the type of analyses), the contractor shall also first upgrade and use the off-line analysis tools, such as TRUM model which needs to be upgraded under this work assignment to match the IPM version 3.1 assumptions, to perform this sub-task. The contractor shall expect no more than ten (15) studies in this sub-task. When all of them need to be done by TRUM, the contract shall expect no more than 50% of these TRUM model run results will be requested by the WACOR's TD to be verified by full scale of the IPM model run. Draft reports resulting from these quick turn-around operations are due five (5) working days after receiving the WACOR's written request. Implementation of a new modeling platform to demonstrate potential air quality benefits available through energy efficiency measures on HEDDs will require 1) enabling IPM to output results at an hourly level, and 2) synchronizing IPM and the air quality modeling platform (CMAQ) in their use of meteorological data and energy demand data, 3) conducting two runs with and without energy efficient measures to analyze reduction in emission levels on HEDD days, and 4) preparing air quality modeling ready files.

In addition, when performing the analyses specified in items 1, 2, and 3 of this task, the contractor shall identify the impact of these changes to the existing regulatory support documents, including the documentation for the economic analyses (EA), the Small Business Regulatory Enforcement Fairness Act (SBREFA), and the Unfunded Mandates Reform Act (UMRA). The contractor shall summarize and present the differences between the results from these new studies and from the existing regulatory support documents to the WACOR. When the differences are significant, the WACOR will issue a written request to the contractor clarifying the sections and the contents in these documents which need to be updated to reflect the new study results.

Depending on the significance of new information, the WACOR will issue a written request for the documentation specified as above. Upon receiving a written request, the contractor shall prepare the draft update documentation and deliver it to the WACOR for review. The contractor shall expect up to two (2) revisions prior to finalization of these documents.

TASK 4: Upgrade the TRUM software and Analysis of Sensitivity of Control Costs for NO_x, SO_2 and Mercury (Hg) Generated Among the Proposed Rules Developed under Multi-pollutant Reduction Technologies

As part of the efforts in collecting control technology information to support the future NEEDS database, the contractor shall work with the WACOR through TD to provide technical support for collecting and developing algorithms for capital, fixed O&M, and variable O&M costs for existing IGCC facilities and pollution control technologies (e.g., such as wet ESP, solvent injection, SO_2 control and similar technologies)

installed in existing fossil-fueled power generating units. Because of the slow responses from the industry, the WACOR recognizes these continuous efforts shall be handled through the full contract period. For the budget purpose, upgraded NEEDS database is only listed as a potential working area. It is anticipated that 35% of the time will be spent on NEEDS database development work. The contractor shall be ready to work on this area when receiving the written notice from WACOR when new data becomes available.

The NEEDS database and IPM model version 3.1 will reflect the updates from previous IPM and NEEDS versions regarding the model plants (e.g., basic units used in IPM models to group similar characteristics boilers in the sense of the boiler types, fuel uses, allowable emission control device selection, etc.). The TRUM model, a simplified IPM full version, uses a reduced model plants package with limited user choice variables but is capable of representing the full version IPM run with some deviation. This capability can save the Government a lot of computer time and facility requirements (e.g., CPU speed, installed memory size, and hard-disk space). Since the TRUM model is not as powerful as the full version of the IPM, it allows CAMD to do in-house quick and rough evaluations of sensitive issues in the rulemaking process without requiring time consuming full IPM version model runs. An older version of the TRUM model is based on an earlier version of the NEEDS. In order to provide the Government the same level of support, under this work assignment, the contractor shall update the TRUM model based on IPM version 3.1 and NEEDS database 3.1. This updated model should be developed in a stand-alone software manner so it can either be installed and used by CAMD staff when installed in EPA owned equipment, or be installed in a contractor designated and security-cleared machine in the contractor's office with the criteria (such as boundary condition, run years) set by CAMD experts. This option will provide the Government a choice to run this model in the most cost effective way if the Government experiences a manpower shortage during the major data crunch period.

TASK 5: Update IPM Parameters and Capabilities in Support of Sensitivity Study as Specified in Task 2

When needed, the WACOR will issue a written request to the contractor to use the results from task 4 to update the IPM parameters and capabilities used in the IPM version 3.1 model. Upon receiving this request, the contractor shall update requested parameters and capabilities of the Integrated Planning Model to ensure that results obtained under Task 2 are technically defensible. The WACOR will also specify in the written request the specific functional areas (e.g., installation cost, O&M cost, efficiency, applicability, and reliability) to be updated. For each functional area, the contractor shall prepare a typed issue paper of 15 pages or less which shall include the following information:

Description of the parameters and capabilities to be updated,
Identification of policy and technical issues to be resolved,
Sources of data for the update.

In addition, for each issue paper, the contractor shall include not more than five extra discussion topics which will be clarified by the WACOR in the written request for these issue papers.

The WACOR and CAMD technical staff will review the issue paper, provide feedback to resolve technical and policy issues, and issue written requests authorizing programming to implement the update. The contractor shall make the programming changes and perform two sets of diagnostic model runs to test the programming changes. The contractor shall provide the WACOR with outputs from the diagnostic runs for review and comment.

For budgeting purposes, the contractor shall assume that the WACOR will request updates of seven (7)

functional areas in preparation for an issue paper in each of the areas, presentation of initial and final run outputs demonstrating achievement of the updated capabilities, and documentation of the updated parameters and capabilities. The delivery schedule for the issue papers, initial and final run outputs, and documentation will be specified by the WACOR in the written request.

TASK 6: Allocation Analysis for Multi-pollutants under Cap and Trade Program

Like most of the existing air pollutant emission reduction rules (e.g., Title IV, SIP Call and S-126), CAIR and CAMR rules (both final rule and rule reconsideration) also include the Cap and Trade Program elements. These rules allow States to use the federal operated Cap and Trade Program to support States in compliance with these rules. When implemented, the Federal Government will calculate and allocate the pollutants allowances for each of the existing power generating units based on the heat input data. The Agency will likely need analyses of allocations methods that may include NOx, SO2, Hg, or CO2.

In the rule making and litigation processes, the contractor shall provide analytical support for the evaluation of emission allowance allocation options within cap-and-trade programs designed to control harmful air emissions from large stationary sources. In addition to the IPM model, the contractor shall also use off-line analysis tools developed in the previous contract for these technical analyses to perform this task. The contractor shall analyze the impacts of allocation methods in cap and trade programs under various national emission control scenarios related to regulating multi-pollutant emissions from the electricity power generating sector. In this type of approach, a limited number of emission allowances are made available to the regulated community, which must be surrendered by each source for emissions during the compliance period. By buying or selling allowances, sources can control the degree to which they must control their emissions. A source that finds emission controls to be particularly expensive can buy allowances, in essence, arranging to have another source take over some of its control burden.

The WACOR will issue a written request to specify the boundary conditions (i.e. pollutant(s) of interest, the allocated allowances, the current emission control condition, and legally allowed emission quantities or rates) for each of the IPM strategy runs. The contractor shall provide the economic analyses that incorporate the use of the IPM strategy model runs to estimate national, state, and source-specific costs and compliance choices, generation, emissions, and prices that occur from the allocation options specified in the written request. The contractor shall also study up to five alternative modeling methods to ascertain the expected impact of the various allocation methods being modeled. The alternative modeling method will be concentrated in the following two study areas and will be driven by a written request from the WACOR:

The options of the allocation methods consist of combinations of characteristics relating to the timing of any changes in the allocations, the basis of these changes, and the recipients of the allocations (e.g. "changing the allocation at the beginning of every calendar year and using the average of the past five year's heat input as the basis to calculate the new allocations" vs. "changing the allocation every five years and the units keeping their allocation for that five years.")

The Contractor shall project the relative consequences of the options for the electricity market using both basic market analysis and detailed computer simulations (IPM as well as off-line analyses).

For any given combination of pollutants, geographic areas, and cap levels (the "policy case"), the contractor shall complete an analysis for the set of allocation options identified in the WACOR's written request. Upon completion of each analysis, the contractor shall deliver a technical support document that

describes the policy case being considered; defines a baseline or reference case; introduces the economic analysis; lays out the options that were analyzed; discusses relevant economic issues; examines the effect of allowances on different generation sources; and presents the parsed results of IPM strategy runs to support these findings.

IV. DELIVERABLES

The contractor shall prepare and deliver electronic files in CD ROM format for all of the final versions of the documentation generated under this work assignment to the WACOR at the end of the completion of this work assignment.

TASK 1: **Work Plan.**

TASK 2: Complete IPM model regulatory runs estimating costs, emission reductions, sensitivity of the IPM runs, feasibility of the air emission control technologies, and reliability of the power generations for the 12 to 60 runs in roughly 2-6 runs per month based on a schedule (to be identified by the WACOR) to support this task. Draft reports (with supporting documentation and results) of each run in electronic file format shall be delivered to the WACOR in floppy diskette or CD-ROM format within seven (7) days after receiving the WACOR's written request. Electronic versions of these final reports in floppy diskette or CD-ROM format are due to the WACOR 14 days after receiving the WACOR's comment.

TASK 3: Draft summary for studies in the areas of "financial analyses," "potential impacts upon employment in other economic sectors," "continuing support in the implementation of the National Energy Policy," "the response to Congressional requests," and the "analysis of impacts of carbon regulations" are due three (3) weeks after the WACOR issues the written request. The contractor shall expect more than 50% of the studies under the "response to Congressional requests" are ad-hoc in nature. When the WACOR specifies "AD-HOC" in the written request, a draft of these report(s) are due within 3 to 7 working days which the WACOR will specify in the written request. The contractor shall expect 2 revisions of these draft reports. Modified versions are due one week after the WACOR's revision comments. Final versions of these reports are due at the end of this work assignment. Final deliverables shall be submitted to the WACOR in electronic form (MS-Word 2003) and transmitted in floppy diskette or CD-ROM format.

Draft summaries for impact on EA, SBREFA, and UMRA documents are due 6 weeks after completion of the associated IPM model regulatory runs. Final documents are due 2 weeks after final comments by the WACOR. Final documents are due at the end of this work assignment. Final deliverable shall be submitted to the WACOR in electronic form (MS-Word 2003) and transmitted in floppy diskette or CD-ROM format.

TASK 4: Contractor shall brief the WACOR monthly about new development in this upgrading process. An electronic copy of the upgraded model and supporting manual will be due at the end of this work assignment.

TASK 5: There are no deliverables under this task item if the WACOR doesn't issue a written request to implement the results from task 2 to IPM version 3.0 and/or 3.1. When issue papers have been requested, draft issue papers are due10 days after each of the written requests are issued by the WACOR. The contractor shall expect up to four revisions for each of these issue papers. Revisions of the issue papers are due 10 days after receipt of EPA's comment. A final issue paper is due 10 days each after receiving EPA's comments of the draft report. IPM program changes are due within 15 days after receiving the WACOR's written request. Diagnostic model runs are due within 7 days after each IPM program changes. Outputs of IPM run results (standardized

electronic reports in ".dat," ".rpt," and ".rpe" files, hard copy of system report, and up to three specific reports [the WACOR will specify this in each of the written requests based on EPA's needs for such IPM runs] developed in IPM version 3.0 and/or 3.1 updated work assignment). The contractor shall expect up to two sets of these diagnostic model runs for each of the program changes. Summary tables to compare the results for diagnostic model runs and its comparable mirror images (e.g. same boundary condition for base case or policy cases) are due five days after receiving EPA's comments among the IPM diagnostic run results.

TASK 6: Complete offline analysis and IPM analysis of up to nine (9) allocations (e.g., three allocation approaches per proposed rule) under this work assignment. Approximately 1- 3 IPM runs per month may be required based on demand. A draft summary of technical support documents examining allocation options are due 3 weeks after the completion of the associated IPM allocation option runs. The contractor shall expect two revision requests from the WACOR. The revised white paper is due 1 week after receiving the WACOR's comments. Final documents of all kinds are due 2 weeks after final comments by the WACOR. Final documents due to the WACOR shall be submitted in electronic form (MS-Word 2003) and transmitted in floppy diskette or CD-ROM. format.

Distribution of Deliverables

Addressee	Copies
EPA Contracting Officer (cover only)	**1**
EPA Work Assignment WACOR	**1**

Work Assignment Contracting Officer's Representative (WACOR):

Murat Kavlak
USEPA/OAR/OAP/CAMD/PDB, 6204J
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Phone: (202)343-9634
Fax: (202)343-2359
E-Mail: Kavlak.Murat@epa.gov

Alternate Work Assignment Contracting Officer's Representative (WACOR):

Gene-Hua Sun
USEPA/OAR/OAP/CAMD/PDB, 6204J
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Phone: (202)343-9119
Fax: (202)343-2359

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-3

[ ] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	A through I

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 04/07/08 To: 03/10/09

Comments:

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	9,000
This Action	$1,072,642.00	0
Total	$1,072,642.00	9,000

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 04/28/08	Cost/Fee: $1,072,642.00	LOE: 9,000
Cumulative Approved:	Cost/Fee: $1,072,642.00	LOE: 9,000

Work Assignment Manager Name MURAT KAVLAK (Signature) (Date)	Branch/Mail Code 6204J Phone Number 202-343-9634 Fax Number 202-343-2359
Project Officer Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 5-22-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title)	Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES
Period of Performance:	From:	04/07/08
	To:	03/10/09
Award Date:		04/03/08
Total Funding:		

WA Totals

The following item(s) have been added:

Category	POP	Amount
Estimated Cost	Base Pd.	$1,072,642.00

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-3

[ ] Original [X] Amendment Number: 2

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	A through I

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/07/08 To: 03/10/09

Comments:
The purpose of this amendment is to revise the SOW and add hours. The contractor shall address the revisions by providing a brief workplan update.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$1,072,642.00	9,000
This Action	$0.00	50
Total	$1,072,642.00	9,050

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $1,072,642.00	LOE: 9,050

Work Assignment Manager Name: MURAT KAVLAK
(Signature) (Date)
Branch/Mail Code: 6204J
Phone Number: 202-343-9634
Fax Number: 202-343-2359

Project Officer Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Other Agency Official Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Contracting Official Name: DEBRA A. MILLER
Debra A. Miller 7-16-08
(Signature) (Date)
Branch/Mail Code:
Phone Number: 202-564-1041
Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*

Date

EPA Form 1900-69 (Rev. 07-95)

TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contract: EP-W-08-018, Work Assignment: 0-3, Amendment: 0002

Summary Information

Title:		TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES
Period of Performance:	From:	04/07/08
	To:	03/10/09
Award Date:		04/03/08
Total Funding:		

Attachments

The following item(s) have been added:

Attachment Name
SOW Revisions

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 9000 to 9050.

SOW Revisions

Contract: EP-W-08-018, Work Assignment: 0-3, Amendment: 0002

The following revisions apply:

Task 2: Increase the number of potential IPM runs from 90 to 110.

Subtask 2: add new study; "Costs, Performance, and Availability of Applicable Nox and SO2 Control Measures for Existing and New Cement Kilns in the U.S."

Task 3: Add new subtask 4.

4. EPA may chose to undertake analysis related to the costs, performance, and availability of applicable NOx and SO2 control measures for existing and new cement kilns in the U.S. Such analysis will be issued to the contractor as a technical direction.

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-3

[ ] Original [X] Amendment Number: 3

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	A through I

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 04/07/08 To: 03/10/09

Comments:

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$1,072,642.00	9,050
This Action	$8,951.00	0
Total	$1,081,593.00	9,050

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 07/25/08	Cost/Fee: $8,951.00	LOE: 50
Cumulative Approved:	Cost/Fee: $1,081,593.00	LOE: 9,050

Work Assignment Manager Name: MURAT KAVLAK	Branch/Mail Code: 6204J
(Signature) (Date)	Phone Number: 202-343-9634
	Fax Number: 202-343-2359
Project Officer Name: SHELBY N. SCHULLER	Branch/Mail Code:
(Signature) (Date)	Phone Number:
	Fax Number:
Other Agency Official Name:	Branch/Mail Code:
(Signature) (Date)	Phone Number:
	Fax Number:
Contracting Official Name: DEBRA A. MILLER	Branch/Mail Code:
(Signature) Debra A Miller 9-8-08 (Date)	Phone Number: 202-564-0966
	Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES

Contract: EP-W-08-018, Work Assignment: 0-3, Amendment: 0003

Summary Information

Title:		TECHNICAL SUPPORT FOR CLEAN AIR MARKETS DIVISION REGULATORY DEVELOPMENT ACTIVITIES
Period of Performance:	From:	04/07/08
	To:	03/10/09
Award Date:		04/03/08
Total Funding:		

WA Totals

The following item(s) have been modified:

Category	POP	From	By	To
Estimated Cost	Base Pd.	$1,072,642.00	$8,951.00	$1,081,593.00

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-4

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/08/08 To: 03/10/09

Comments:
The Contractor shall prepare and deliver a workplan in accordance with the contract.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	2,845

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 2,845

Work Assignment Manager Name: MAUREEN K. HINGELEY	Branch/Mail Code
(Signature) (Date)	Phone Number 202-564-1306
	Fax Number
Project Officer Name: DEBRA A. MILLER	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Other Agency Official Name	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Contracting Official Name: DEBRA A. MILLER Debra A Miller 4-8-08	Branch/Mail Code 3803R
(Signature) (Date)	Phone Number 202-564-1041
	Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

SUPPORT FOR CAAAC a[redacted] SUBCOMITTEES and 2006 [redacted]ean air Excellence Awards

Contract: EP-W-08-018, Work Assignment: 0-4

Summary Information

Title:		SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards
Period of Performance:	From:	04/08/08
	To:	03/10/09
Award Date:		
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: MAUREEN K. HINGELEY
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number: 202-564-1306
Fax Number:
E-Mail Address: hingeley.maureen@epa.gov

Attachments

Attachment Name
Support for the Clearn Air Act Advisory Committee (CAAAC) and Subcomittee and Clean Air Excellence Awards program

Support for the Clearn A[redacted]ct Advisory Committee (CA[redacted]C) and Subcomittee and Clean Air

Contract: EP-W-08-018, Work Assignment: 0-4

BACKGROUND

EPA originally established the Clean Air Act Advisory Committee (CAAAC) in November 1990, and renewed the charter of the CAAAC seven times to maintain its function until November 15, 2006. The committee is authorized under the Federal Advisory Committee Act, 5 U.S.C., App. Section 9 (c). The purpose of the Committee is to provide independent advice and counsel to the Agency on policy and technical issues associated with the implementation of the Clean Air Act Amendments of 1990 (CAA). The Advisory Committee consists of some 50 members from the regulated and private industry, the academic community, state and local government and environmental organizations. The Committee is normally consulted three times a year on economic, environmental, technical, scientific and enforcement issues. The results of these meetings will be a written report providing advice to U.S. EPA on implementing the CAA.

Much of the work of the CAAAC is accomplished through its subcommittees. Currently there are four (4) subcommittees:1) Permits/NSR/Toxics; 2) Economic Incentives and Regulatory Innovation: 3) Air Quality Management; 4) Mobile Sources Technical Review Subcommittee. This statement of work will provide contractor meeting support for the full committee and its subcommittees.

PURPOSE AND SCOPE OF WORK

This statement of work under this contract will provide for general conference support and other duties related to supporting the CAAAC and its four subcommittee's activities for the period from award to March 10, 2009. The contractor shall prepare documents for U.S. EPA's use that present the advice and specific recommendations of the CAAAC and its appropriate subcommittees on issues related to implementing the CAA. In order to prepare these documents, the contractor shall convene up to (8) one - three day meeting of the CAAAC and its subcommittees and undertake other appropriate advisory committee support activities as described in the following tasks. The meetings will be held approximately four months apart with the exact dates and location to be determined by the Work Assignment Contracting Officer's Representative (WA COR). The contractor shall provide support for this meeting as described in the tasks below.

Specific tasks to be accomplished under the proposed contract include:

TASKS

Task 1: Prepare Work Plan: The Contractor shall prepare a work plan in accordance with the terms and conditions of the contract clause B.2 "Work Assignments" and Attachment 2 "Reports of Work" section entitled: "Preparation and Submission of Work Plans."

Task 2: Monthly Progress Reports. The contractor shall prepare monthly progress reports on a task by task basis that reports on work performed, problems encountered, if any, and work anticipated during the following month.

Task 3: Meeting planning and logistical support. The contractor shall provide planning and logistical support for the CAAAC and its subcommittees meetings. Meeting planning shall include hotel site investigation and selection, solicitation of competitive hotel bids, as necessary, arrangement of meeting space and provision of all equipment and meeting supplies.
The contractor shall be responsible for coordinating all on-site logistical support during these Committee and subcommittee meetings.

Logistical support shall be provided in advance of the meetings as well as during the meetings. Such support shall include determining the most advantageous meeting room configuration, staffing registration desks, coordinating the transcription of proceedings, document distribution, coordinating audio-visual aids, and providing other support activities at the meetings as required.

Task 4: Administrative Support. The contractor shall provide administrative support as necessary to facilitate or expedite preparation for, and the conduct of, the meetings. Activities conducted under this task shall include, but are not limited to, the following:

- Preparing registration list;
- Preparing name badges and table cards;
- Handling communications with attendees in advance of meetings;
- Assembling and reproducing background or supplemental materials;
- Preparing and distributing meeting agendas;
- Developing and maintaining mailing lists;
- Documenting proceedings and preparing minutes in accordance with the Federal Advisory Committee Act requirements;
- Making local as well as long distance telephone calls to Advisory members for the purpose of giving and receiving administrative information in relation to the meetings;
- Utilizing commercial message service for the purpose of receiving and disseminating information. It is estimated that commercial message services will be required no more than five (5) times per meeting;
- Performing any administrative support activities such as, the reproduction and distribution of information and analyses prepared at the Committee and subcommittee meetings, assisting CAAAC members in obtaining information and materials relevant to CAAAC discussions.

Task 5: Technical and Analytical Support for Presentation. The contractor shall provide technical support to the Committee and subcommittee meetings by conducting analyses and providing other technical support for the preparation of presentation, briefings, issues papers, and background and/or supplemental materials associated with the meetings and the topics addressed at the meetings. Graphics support, if needed, shall be included. There will be no more than three (3) topics for this meeting that would require contractor support. WA COR technical direction is required for analytical and/or technical support.

Task 6: Prepare draft and final documents summarizing CAAAC and its subcommittees meeting proceedings, recommendations, and technical recommendations to the EPA. Draft documents, including comprehensive minutes of all meetings, shall be prepared and submitted to the WA COR for review within three (3) weeks following subcommittee meetings. Draft documents shall be reviewed and approved by the WA COR prior to return to contractor. WA COR review comments will be provided two (2) weeks following receipt of draft documents. Final documents shall be submitted one (1) week following receipt of agency comments.

Task 7: Support to the CAAAC's Web site. The contractor shall provide quality assurance of the CAAAC's Web page, including periodic review to ensure that the site is functioning properly and content is posted correctly. The contractor shall forward to the WA COR, via E-mail, all recommendations for improvements of the Web site.

Task 8: Support to the Clean Air Excellence Awards Program. The contractor shall provide technical, analytical and logistical support to the Project Officer in the management of the Clean Air Excellence Awards

Program, an annual OAR awards program originally recommended to EPA-OAR by the Advisory Committee. Draft and final materials, including but not limited to the following: outreach information announcing the year 2008 program, award proposal packets, scoring sheets for judging proposals, summary listing of proposals and their scoring by OAR and CAAAC reviewers, award ceremony program, summary of winners' projects, award certificates, and other appropriate documents shall be prepared in support of both the 2007 and 2008 annual awards program. The contractor will work in close coordination with the WA COR to provide support to CAAAC members, OAR staff and senior OAR management in the successful implementation of this task item.

DELIVERABLES

1. Monthly progress reports will be provided to the WA COR.

2. Planning and logistical support under Task 2 will be provided to the agency in advance of the CAAAC and subcommittee(s) meetings. The WA CORr will notify the contractor of meeting date requirements in order that advance logistical support can be provided under the terms of the Statement of Work.

3. Administrative support under Task 3 will be provided to the agency (CAAAC and its subcommittees) approximately 2 to 3 days prior to each meeting under the direction of the WA COR. Support during the meetings will be provided in a manner that best facilitates the effective conduct of the meetings.

4. Technical and analytical support (CAAAC and its subcommittees) for use at its meetings under the direction of the WA COR and in consultation with appropriate senior EPA managers.
5. Summary Documents - As described in Task 5, the contractor shall submit a draft summary document, including comprehensive minutes of all meetings, and final summary document following each meeting of the CAAAC and its standing subcommittees. Draft documents are due within three weeks following the conclusion of each meeting unless otherwise notified by the WA COR. Final documents are due within two weeks following the receipt of EPA review comments. EPA comments will be provided no later than two weeks from receipt of the draft documents.

6. Documents and other information described in Task 7 shall be prepared at the direction of the WA COR for his review and approval. Due dates will be determined by the WA COR, based upon an approved schedule for the implementation of the year 2008 awards program.

1

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-4

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/08/08 To: 03/10/09

Comments:
The Contractor shall prepare and deliver a workplan in accordance with the contract.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	2,845

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 2,845

Work Assignment Manager Name: MAUREEN K. HINGELEY	Branch/Mail Code
(Signature) (Date)	Phone Number 202-564-1306
	Fax Number
Project Officer Name: DEBRA A. MILLER	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Other Agency Official Name	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Contracting Official Name: DEBRA A. MILLER Debra A Miller 4-8-08	Branch/Mail Code 3803R
(Signature) (Date)	Phone Number 202-564-1041
	Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

SUPPORT FOR CAAAC a[redacted] SUBCOMITTEES and 2006 [redacted]ean air Excellence Awards

Contract: EP-W-08-018, Work Assignment: 0-4

Summary Information

Title:		SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards
Period of Performance:	From:	04/08/08
	To:	03/10/09
Award Date:		
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: MAUREEN K. HINGELEY
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number: 202-564-1306
Fax Number:
E-Mail Address: hingeley.maureen@epa.gov

Attachments

Attachment Name
Support for the Clearn Air Act Advisory Committee (CAAAC) and Subcomittee and Clean Air Excellence Awards program

Support for the Clearn A[redacted]ct Advisory Committee (CA[redacted]C) and Subcomittee and Clean Air

Contract: EP-W-08-018, Work Assignment: 0-4

BACKGROUND

EPA originally established the Clean Air Act Advisory Committee (CAAAC) in November 1990, and renewed the charter of the CAAAC seven times to maintain its function until November 15, 2006. The committee is authorized under the Federal Advisory Committee Act, 5 U.S.C., App. Section 9 (c). The purpose of the Committee is to provide independent advice and counsel to the Agency on policy and technical issues associated with the implementation of the Clean Air Act Amendments of 1990 (CAA). The Advisory Committee consists of some 50 members from the regulated and private industry, the academic community, state and local government and environmental organizations. The Committee is normally consulted three times a year on economic, environmental, technical, scientific and enforcement issues. The results of these meetings will be a written report providing advice to U.S. EPA on implementing the CAA.

Much of the work of the CAAAC is accomplished through its subcommittees. Currently there are four (4) subcommittees:1) Permits/NSR/Toxics; 2) Economic Incentives and Regulatory Innovation: 3) Air Quality Management; 4) Mobile Sources Technical Review Subcommittee. This statement of work will provide contractor meeting support for the full committee and its subcommittees.

PURPOSE AND SCOPE OF WORK

This statement of work under this contract will provide for general conference support and other duties related to supporting the CAAAC and its four subcommittee's activities for the period from award to March 10, 2009. The contractor shall prepare documents for U.S. EPA's use that present the advice and specific recommendations of the CAAAC and its appropriate subcommittees on issues related to implementing the CAA. In order to prepare these documents, the contractor shall convene up to (8) one - three day meeting of the CAAAC and its subcommittees and undertake other appropriate advisory committee support activities as described in the following tasks. The meetings will be held approximately four months apart with the exact dates and location to be determined by the Work Assignment Contracting Officer's Representative (WA COR). The contractor shall provide support for this meeting as described in the tasks below.

Specific tasks to be accomplished under the proposed contract include:

TASKS

Task 1: Prepare Work Plan: The Contractor shall prepare a work plan in accordance with the terms and conditions of the contract clause B.2 "Work Assignments" and Attachment 2 "Reports of Work" section entitled: "Preparation and Submission of Work Plans."

Task 2: Monthly Progress Reports. The contractor shall prepare monthly progress reports on a task by task basis that reports on work performed, problems encountered, if any, and work anticipated during the following month.

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The contractor shall be responsible for coordinating all on-site logistical support during these Committee and subcommittee meetings.

Logistical support shall be provided in advance of the meetings as well as during the meetings. Such support shall include determining the most advantageous meeting room configuration, staffing registration desks, coordinating the transcription of proceedings, document distribution, coordinating audio-visual aids, and providing other support activities at the meetings as required.

Task 4: Administrative Support. The contractor shall provide administrative support as necessary to facilitate or expedite preparation for, and the conduct of, the meetings. Activities conducted under this task shall include, but are not limited to, the following:

- Preparing registration list;
- Preparing name badges and table cards;
- Handling communications with attendees in advance of meetings;
- Assembling and reproducing background or supplemental materials;
- Preparing and distributing meeting agendas;
- Developing and maintaining mailing lists;
- Documenting proceedings and preparing minutes in accordance with the Federal Advisory Committee Act requirements;
- Making local as well as long distance telephone calls to Advisory members for the purpose of giving and receiving administrative information in relation to the meetings;
- Utilizing commercial message service for the purpose of receiving and disseminating information. It is estimated that commercial message services will be required no more than five (5) times per meeting;
- Performing any administrative support activities such as, the reproduction and distribution of information and analyses prepared at the Committee and subcommittee meetings, assisting CAAAC members in obtaining information and materials relevant to CAAAC discussions.

Task 5: Technical and Analytical Support for Presentation. The contractor shall provide technical support to the Committee and subcommittee meetings by conducting analyses and providing other technical support for the preparation of presentation, briefings, issues papers, and background and/or supplemental materials associated with the meetings and the topics addressed at the meetings. Graphics support, if needed, shall be included. There will be no more than three (3) topics for this meeting that would require contractor support. WA COR technical direction is required for analytical and/or technical support.

Task 6: Prepare draft and final documents summarizing CAAAC and its subcommittees meeting proceedings, recommendations, and technical recommendations to the EPA. Draft documents, including comprehensive minutes of all meetings, shall be prepared and submitted to the WA COR for review within three (3) weeks following subcommittee meetings. Draft documents shall be reviewed and approved by the WA COR prior to return to contractor. WA COR review comments will be provided two (2) weeks following receipt of draft documents. Final documents shall be submitted one (1) week following receipt of agency comments.

Task 7: Support to the CAAAC's Web site. The contractor shall provide quality assurance of the CAAAC's Web page, including periodic review to ensure that the site is functioning properly and content is posted correctly. The contractor shall forward to the WA COR, via E-mail, all recommendations for improvements of the Web site.

Task 8: Support to the Clean Air Excellence Awards Program. The contractor shall provide technical, analytical and logistical support to the Project Officer in the management of the Clean Air Excellence Awards

Program, an annual OAR awards program originally recommended to EPA-OAR by the Advisory Committee. Draft and final materials, including but not limited to the following: outreach information announcing the year 2008 program, award proposal packets, scoring sheets for judging proposals, summary listing of proposals and their scoring by OAR and CAAAC reviewers, award ceremony program, summary of winners' projects, award certificates, and other appropriate documents shall be prepared in support of both the 2007 and 2008 annual awards program. The contractor will work in close coordination with the WA COR to provide support to CAAAC members, OAR staff and senior OAR management in the successful implementation of this task item.

DELIVERABLES

1. Monthly progress reports will be provided to the WA COR.

2. Planning and logistical support under Task 2 will be provided to the agency in advance of the CAAAC and subcommittee(s) meetings. The WA CORr will notify the contractor of meeting date requirements in order that advance logistical support can be provided under the terms of the Statement of Work.

3. Administrative support under Task 3 will be provided to the agency (CAAAC and its subcommittees) approximately 2 to 3 days prior to each meeting under the direction of the WA COR. Support during the meetings will be provided in a manner that best facilitates the effective conduct of the meetings.

4. Technical and analytical support (CAAAC and its subcommittees) for use at its meetings under the direction of the WA COR and in consultation with appropriate senior EPA managers.
5. Summary Documents - As described in Task 5, the contractor shall submit a draft summary document, including comprehensive minutes of all meetings, and final summary document following each meeting of the CAAAC and its standing subcommittees. Draft documents are due within three weeks following the conclusion of each meeting unless otherwise notified by the WA COR. Final documents are due within two weeks following the receipt of EPA review comments. EPA comments will be provided no later than two weeks from receipt of the draft documents.

6. Documents and other information described in Task 7 shall be prepared at the direction of the WA COR for his review and approval. Due dates will be determined by the WA COR, based upon an approved schedule for the implementation of the year 2008 awards program.

1

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-4

[ ] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 04/08/08 To: 03/10/09

Comments:
The purpose of this amendment is to change CORs.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 8)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	2,845
This Action	$0.00	0
Total	$0.00	2,845

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 2,845

Work Assignment Manager Name: JAMES P. CHILDERS	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Project Officer Name: DEBRA A. MILLER	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Other Agency Official Name	Branch/Mail Code
(Signature) (Date)	Phone Number
	Fax Number
Contracting Official Name: DEBRA A. MILLER	Branch/Mail Code 3803R
(Signature) Debra A. Miller 4-29-08 (Date)	Phone Number 202-564-1041
	Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

SUPPORT FOR CAAAC a[redacted] SUBCOMITTEES and 2006 [redacted]ean air Excellence Awards

Contract: EP-W-08-018, Work Assignment: 0-4, Amendment: 0001

Summary Information

Title:		SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards
Period of Performance:	From:	04/08/08
	To:	03/10/09
Award Date:		04/08/08
Total Funding:		

Procurement Management Roles

The following item(s) have been modified:

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: MAUREEN K. HINGELEY
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Date Role Ended: 04/29/08

Mail Code:
Phone Number: 202-564-1306
Fax Number:
E-Mail Address: hingeley.maureen@epa.gov

The following item(s) have been added:

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: JAMES P. CHILDERS
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number:
Fax Number:
E-Mail Address: childers.pat@epa~~.rtp~~.gov

EPA

Unite[redacted]s Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Ass[redacted]nt Number
0-4

[] Original [X] Amendment Number: 2

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR CAAAC and SUBCOMITTEES and 2006 Clean air Excellence Awards

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out
[X] Work Assignment Amendment [] Incremental Funding
[X] Work Plan Approval

Periods of Performance
From: 04/08/08 To: 03/10/09

Comments:

[] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount	(Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1											
2											
3											
4											
5											

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	2,845
This Action	$0.00	0
Total	$0.00	2,845

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 07/03/08	Cost/Fee: $449,921.00	LOE: 2,845
Cumulative Approved:	Cost/Fee: $0.00	LOE: 2,845

Work Assignment Manager Name JAMES P. CHILDERS (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Project Officer Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A. Miller 7-14-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-5

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Health, Welfare, and Economic Assessments of Reducing Air Pollution

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 05/12/08 To: 03/10/09

Comments:

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	1,065

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 1,065

Work Assignment Manager Name
DAVID P. RISLEY
(Signature) (Date)
Branch/Mail Code 6204J
Phone Number (202)343-9177
Fax Number

Project Officer Name
(Signature) (Date)
Branch/Mail Code
Phone Number
Fax Number

Other Agency Official Name
(Signature) (Date)
Branch/Mail Code
Phone Number
Fax Number

Contracting Official Name
DEBRA A. MILLER
Debra A. Miller 5-12-08
(Signature) (Date)
Branch/Mail Code 3803R
Phone Number 202-564-1041
Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*

Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		Health, Welfare, and Economic Assessments of Reducing Air Pollution
Period of Performance:	From:	05/12/08
	To:	03/10/09
Award Date:		05/12/08
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: DAVID P. RISLEY
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 6204J
Phone Number: (202)343-9177
Fax Number:
E-Mail Address: risley.david@epa.gov

Technical Direction authority is also delegated to Vicki Sandiford - only for Task 9.

Attachments

Attachment Name
Health, Welfare, and Economic Assessments of Reducing Air Pollution

I. BACKGROUND AND PURPOSE

The Assessment & Communications Branch (ACB) of the Clean Air Markets Division (CAMD) of the Office of Atmospheric Programs (OAP) is responsible for assessing the impact of emission reductions in terms of their benefits to human health, visibility, ecology, etc. The analyses to be performed under this Work Assignment are mandated by Sections 812 and 901 of the Clean Air Act Amendments (CAAA) of 1990. The analyses also serve to evaluate the effectiveness of CAMD's programs in reducing ambient concentrations of PM (including but not limited to PM2.5, PM10, etc.) compatible with the Office of Management and Budget's (OMB's) Program Assessment Rating Tool (PART).

The main purpose of this work assignment is to complete the efforts begun under work plan 3-1 of this contract, "Indicators of the Benefits of Reducing Air Pollution" including: identifying, analyzing, quantifying, and monetizing health benefits and economic impacts of Title IV, the NOx SIP Call, the Clean Air Interstate Rule, Clean Air Mercury Rule, Clean Air Visibility Rule, developing air quality policies, and other CAMD programs to reduce air pollution.

II. CONTRACT LEVEL STATEMENT OF WORK REFERENCE

The tasks to be performed under this work assignment are consistent with the areas of analyses authorized in sections I. A; III. A. (c), (d), (e), & (p), as well as III. F (h) & (i) of the contract=s Statement of Work:

III. STATEMENT OF WORK TASKS

TASK 1: Prepare Work Plan

The Contractor will prepare a Work Plan in accordance with the terms and conditions of contract clauses B.2 entitled Work Assignments and B.3 entitled Preparation and Submission of Work Plans.

TASK 2: Calculate the Estimated Human Health Benefits and Valuation of Current or Potential Air Quality Scenarios and Programs

The contractor will analyze the human health benefits and valuation of air quality scenarios or programs that are relevant to CAMD's mission. These assessments may include reassessments of existing programs administered by CAMD (including Title IV, the NOx SIP Call, the Clean Air Interstate Rule, and the Clean Air Visibility Rule) due to changes in modeling methodologies (such as emissions, air quality, and epidemiology). The assessments may also be prospective regarding potential air quality scenarios. The assessments may focus on domestic or international health effects of air pollution. The assessments will rely primarily on modeling of emissions, air quality, and health functions. This task is related to work that was completed by the contractor under contract 68-W-03-028, work assignment 3-1. The contractor shall prepare short (approximately 5 to 10 page) memos or presentations for EPA outlining the methods used and the results of these analyses. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 3: Develop the Capacity to Monitor Real World Human Health Benefits and Valuation of Changes in Air Quality

The contractor will develop and assist in the application of a system to monitor real world human health benefits of changing air quality. Identification of sources of emissions, air quality, and epidemiological data is essential to this task as well as developing and applying a method for their use. Changes in air quality that are assessed should be relevant to CAMD's mission (in particular, power plant emissions). The development portion of this task is a continuation of work begun under contract 68-W-03-028, work assignment 3-1. The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA outlining the data sources and

methods used for methodology development. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 4: Calculate the Estimated Welfare Benefits and Valuation of Current or Potential Air Quality Scenarios and Programs
The contractor will analyze the welfare benefits and valuation of air quality scenarios or programs that are relevant to CAMD's mission. Welfare endpoints may include the impacts of air quality to ecological systems, visibility, recreational activities, agriculture, commerce, and industry. The primary goal of this task is to expand the ability of CAMD to assess and value welfare endpoints. The assessments should focus on existing programs administered by CAMD but should also be applicable to prospective air quality and policy scenarios. The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA describing the results. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 5: Calculate the Combined Health and Welfare Benefits of CAMD Programs
Assessments of CAMD programs (such as Title IV, the NOx Budget Trading Program, and the Clean Air Interstate Rule) generally evaluate each of these programs independently. The contractor shall develop and apply a method to evaluate combinations of these programs so that the benefit of overlapping programs can be estimated (such as the work begun under contract 68-W-03-028, work assignment 3-1 to assess the combined benefits of Title IV and CAIR). The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA detailing the results of the analysis. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 6: Develop and Apply a Method of Measuring Equity of CAMD Programs The contractor shall continue work begun under contract 68-W-03-028, work assignment 3-1 to develop multiple methodologies to evaluate the effectiveness of CAMD Programs, beginning with Title IV, with respect to Environmental Justice. The contractor shall prepare a memo (approximately 10 pages) for EPA outlining the proposed methodologies and the justifications, advantages, and limitations of each method. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 7: Develop and Apply a Method of Measuring Economic Performance
The contractor shall develop and apply methods to assess the economic performance of CAMD programs. Several methods of economic analyses should be conducted and presented to the WAM for review. Analyses may focus on the emissions market or the economics of industry compliance with CAMD programs. The contractor shall prepare a memo (approximately 5 to 10 pages) or presentation for EPA detailing the methods developed for the economic assessment. Additional products shall be developed in consultation with the WAM. This task shall be performed in consultation with the WAM.

TASK 8: Review of Assessments
The contractor shall review work developed by CAMD staff and third parties including the academic community and non-governmental organizations that related to CAMD programs. The contractor shall rely on their expertise in the economics and benefits of CAMD programs to provide feedback on the appropriateness and accuracy of CAMD program evaluations. The contractor shall prepare short memos (approximately 2-3 pages) or presentations for EPA detailing the review of the program assessments. This task shall be performed in consultation with the WAM.

TASK 9: Workshops, Surveys and Focus Group Sessions
Subtask A: The Contractor shall plan, organize, conduct and facilitate a workshop. The workshop objectives

include exploring and developing information regarding possible methods and designs for public perception and/or valuation surveys and focus groups that could be used to inform Particulate Matter Secondary National Ambient Air Quality Standards reviews. In particular, this workshop would explore the feasibility of using these methods to provide additional information beyond what is currently available on the acceptability of and/or value placed on various levels of visibility impairment in urban/suburban settings associated both with and without traditional scenic vistas. In so doing, the Contractor shall:

-Identify key issues/topics for discussion with input/review by the EPA COR, including a range of viable alternative survey designs as straw-man proposals to promote productive workshop discussion;

-Develop a list of appropriate workshop invitees that include the requisite expertise;

-Prepare a review of the visibility-related public perception and public valuation literature, including a complete and thorough review of this information published since 2000, as well as any other literature that is considered relevant to the key issues to be discussed and provide this information to attendees prior to the workshop as background material;

-In consultation with the EPA COR identify a suitable location, venue and dates for the workshop;

-Make venue arrangements, conduct and facilitate the workshop; and

-Prepare a summary of workshop discussions and outcomes.

Subtask B: Should the EPA COR decide, following the workshop, to proceed with the development of a survey vehicle and/or conduct focus group sessions, the Contractor shall design and conduct surveys and/or focus group sessions as needed to provide additional data or methods to evaluate the impacts of air pollution on public perceptions and/or values, both non-monetary and/or monetary, that could be used to support various risk and/or benefits analyses as identified by the EPA. In planning a survey or focus group session, the Contractor shall consider characteristics of respondents that are required to obtain sufficient data for analysis, such as location of respondents, demographic and ecologic parameters of respondents, economic variables, and air pollution parameters. The survey instrument or focus group discussion issues shall be reviewed by the EPA COR and revised based on EPA COR comments. External reviewers of the survey instrument or focus group discussion issues may also be required. Upon approval of the survey instrument or focus group issues, the Contractor shall administer the survey or focus group sessions according to the approved plan. The Contractor shall record all responses, itemize responses in a database, and analyze the results of the survey or focus group sessions through statistical procedures or by other approved methods. The Contractor shall submit to the EPA COR a report that documents the plan and methodology, the survey or focus group instrument, the data collected, and results of the analysis.

The Contractor shall determine and summarize the non-monetary and/or monetary visibility benefits that are expected to occur as a result of reductions in particulate matter-induced visibility impairment resulting from implementation of current and/or future air quality regulations. This analysis will include predicted/modeled visibility changes in urban/suburban visibility levels provided by EPA based on estimates from air quality modeling results. The Contractor will prepare a report for the EPA COR outlining the survey and assessment methods used and the results. This analysis will be done in consultation with the EPA COR

V. DELIVERABLES

TASK 1: Prepare Work Plan

a. Work Plan - in accordance with clauses B.2 and B.3 of the contract.

b. Monthly Progress Reports - in accordance with the terms and conditions of the Contract.

TASK 2: Calculate the Estimated Human Health Benefits and Valuation of Current or Potential Air Quality Scenarios and Programs

The contractor shall prepare short (approximately 5 to 10 page) memos or presentations for EPA outlining the methods used and the results of these analyses. Additional products shall be developed in consultation with the WAM.

TASK 3: Develop the Capacity to Monitor Real World Human Health Benefits and Valuation of Changes in Air Quality
The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA outlining the data sources and methods used for methodology development. Additional products shall be developed in consultation with the WAM.

TASK 4: Calculate the Estimated Welfare Benefits and Valuation of Current or Potential Air Quality Scenarios and Programs
The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA describing the results. Additional products shall be developed in consultation with the WAM.

TASK 5: Calculate the Combined Health and Welfare Benefits of CAMD Programs
The contractor shall prepare a short (approximately 5 to 10 page) memo or presentation for EPA detailing the results of the analysis. Additional products shall be developed in consultation with the WAM.

TASK 6: Develop and Apply a Method of Measuring Equity of CAMD Programs The contractor shall prepare a memo (approximately 10 pages) for EPA outlining the proposed methodologies and the justifications, advantages, and limitations of each method. Additional products shall be developed in consultation with the WAM.

TASK 7: Develop and Apply a Method of Measuring Economic Performance
The contractor shall prepare a memo (approximately 5 to 10 pages) or presentation for EPA detailing the methods developed for the economic assessment. Additional products shall be developed in consultation with the WAM.

TASK 8: Review of Assessments
The contractor shall prepare short memos (approximately 2-3 pages) or presentations for EPA detailing the review of the program assessments.

TASK 9: Workshops, Surveys and Focus Group Sessions
The table below indicates the desired deliverables and corresponding delivery schedule for subtasks A and B in task 9:

Subtask A

Deliverable List of key issues/topic areas for discussion at workshop
Schedule Within 14 days of the effective date of this WA

Deliverable List of key experts/ participants to invite to workshop
Schedule Within 21 days of the effective date of this WA

Deliverable List of possible workshop sites, dates, & associated logistics/ cost estimates Schedule Within 21 days of the effective date of this WA

Deliverable Set of background info. for distribution to workshop attendees
Schedule By July 1, 2008

Deliverable Summary report of workshop proceedings/outcomes
Schedule Within 30 days of workshop

Subtask B

Deliverable Draft survey instrument design
Schedule To be determined
Deliverable Final survey design that takes into account EPA COR and/or peer review comments
Schedule To be determined

Deliverable Report describing survey plan/method, survey data and analyses results
Schedule To be determined

Deliverable Draft benefits assessment methodology
Schedule To be determined

Deliverable Benefits assessment report describing non-monetary and monetary visibility benefits assessment results.

Schedule To be determined

Distribution of Deliverables:

Addressee	Copies
EPA Contracting Officer	1
EPA Work Assignment Manager (COR)	1

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-5

[ ] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	Health, Welfare, and Economic Assessments of Reducing Air Pollution

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 05/12/08 To: 03/10/09

Comments:

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	1,065
This Action	$0.00	0
Total	$0.00	1,065

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 06/02/08	Cost/Fee: $138,920.00	LOE: 1,065
Cumulative Approved:	Cost/Fee: $0.00	LOE: 1,065

Work Assignment Manager Name: DAVID P. RISLEY	Branch/Mail Code: 6204J
(Signature) (Date)	Phone Number: (202)343-9177
	Fax Number:
Project Officer Name:	Branch/Mail Code:
(Signature) (Date)	Phone Number:
	Fax Number:
Other Agency Official Name:	Branch/Mail Code:
(Signature) (Date)	Phone Number:
	Fax Number:
Contracting Official Name: DEBRA A. MILLER	Branch/Mail Code: 3803R
(Signature) Debra A. Miller 7-21-08 (Date)	Phone Number: 202-564-1041
	Fax Number:

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title) | Date

EPA Form 1900-69 (Rev. 07-95)

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-6

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	ATMOSPHERIC DEPOSITION MODELING SUPPORT FOR TMDLs and WATERSHED ANALYSES

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 06/05/08 To: 03/10/09

Comments:
The contractor shall provide a workplan in accordance with the contract.

[ ] Superfund **Accounting and Appropriations Data** [X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount	(Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1											
2											
3											
4											
5											

Authorized Work Assignment Ceiling

	Cost/Fee	LOE
Contract Period: Previously Approved		
This Action		
Total	$0.00	350

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 350

Work Assignment Manager Name: RUTH A. CHEMERYS (Signature) (Date)	Branch/Mail Code 4503-T Phone Number 202-566-1216 Fax Number 202-566-1437
Project Officer Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name: DEBRA A. MILLER (Signature) Debra A. Miller 6-5-08 (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

ATMOSPHERIC DEPOSITION MODELING SUPPORT FOR TMDLs and WATERSHED ANALYSES

Contract: EP-W-08-018, Work Assignment: 0-6

Summary Information

Title:		ATMOSPHERIC DEPOSITION MODELING SUPPORT FOR TMDLs and WATERSHED ANALYSES
Period of Performance:	From:	06/05/08
	To:	03/10/09
Award Date:		
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: RUTH A. CHEMERYS
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 4503-T
Phone Number: 202-566-1216
Fax Number: 202-566-1437
E-Mail Address: chemerys.ruth@epa.gov

Attachments

Attachment Name
Atmospheric Deposition Modeling Support for TMDLs and Watershed Analyses

Background and Purpose

Under a previous work assignment (ICF #68-W-03-028, WA 4-30), the EPA Office of Water conducted atmospheric deposition modeling for the pollutant mercury. The modeling was conducted for EPA by ICF with the purpose of providing States and EPA Regions with data needed to support Total Maximum Daily Load (TMDL) and related watershed analyses.

Over 8,500 water-bodies are listed by states as impaired by mercury, and states must develop TMDLs for impaired waters. TMDLs identify the pollutant loadings to a water-body, and determine the pollutant loads reductions needed to meet water quality standards. TMDLs account for pollutants loadings from both water point sources and non-point sources, including pollutants from atmospheric sources.

The mercury deposition modeling conducted under the previous work assignment (ICF #68-W-03-028, WA 4-30) used the Regional Modeling System for Aerosols and Deposition (REMSAD) and the Community Multi-scale Air Quality (CMAQ) model. The modeling is complete, and a draft report summarizing the model results was prepared under that work assignment. EPA is beginning to distribute the model results and report to the States and Regions for additional review. The purpose of this work assignment is to: 1) assist EPA in making additional revisions and updates to the report identified during State and Regional review; 2) assist EPA in answering questions about the modeling and report; 3) conduct additional modeling and sensitivity analyses regarding model parameters and sources that were identified as gaps in the previous modeling work; and 4) assist in preparing a paper on selected modeling results (i.e., mercury from wildfires) for submission to a peer-reviewed scientific journal.

Task Descriptions

The contractor shall conduct the following tasks:

Task 1: Prepare Work Plan

The Contractor shall prepare a Work Plan in accordance with the terms and conditions of the contract sections entitled "Preparation and Submission of Work Plans" and the "Work Assignment Clause."

Deliverables and schedule: Contractors' workplan within 20 calendar days of receipt of work assignment.

Task 2: Updated Mercury Deposition Modeling Results

Task 2a: Revise Mercury Deposition Modeling Report

A report entitled "Model-Based Analysis and Tracking of Airborne Mercury Emissions to Assist in Watershed Planning" was prepared under Contract #68-W-03-028, WA 4-30 and submitted to EPA in March 2008. EPA's Office of Water is distributing the report to the EPA Regional offices and states. Additional updates and revisions may be necessary based on Regional and state review. The contractors shall assist the EPA COR in revising or updating modeling report as necessary based on Regional and State comments and new data. EPA shall provide the report and any relevant data necessary for updating the report to the contractor, and will compile comments from Regions and states to be incorporated in the report. The contractor shall prepare one draft and one final report.

Deliverables and schedule: Draft report within 30 days of comments received from COR; final report within 30

days of final review by COR.

Task 2b: Deposition From Aggregate Sources

The above report describing the REMSAD modeling under the previous work assignment identified the sources in each state that contributed the most to in-state mercury deposition by "tagging" specific sources. Sources other than those identified to be tagged individually were combined into a tag called the "collective sources." For fourteen states, the report indicated that the tag category "collective sources" or aggregate sources were the dominant in-state mercury contribution, i.e., the dominant source of deposition in those states was a group of sources that were of moderate size, none of which were by themselves large enough to warrant their own "tag" in the REMSAD modeling. Under this task, the contractor shall prepare a memo to EPA describing the emissions from the sources in areas of each state where the "collective" sources dominated the deposition. This description shall include the name of the sources, speciated emissions, and stack parameters for the sources included in the "collective" tag. As determined by the COR, deposition modeling results should be prepared in geographic information systems (GIS) compatible format.

Deliverables and schedule: Memorandum on deposition from aggregate sources within 60 days of work assignment approval.

Task 3: Conference Calls with Regions and States

Participate with the COR and other EPA technical staff on conference calls to answer questions about modeling report and provide any updates regarding mercury emissions sources (up to 10 calls, or one per Region)

Deliverables and schedule: Up to 10 conference calls as scheduled by the COR. Dates for the calls will be determined based on each Region's availability.

Task 4: Modeling and Sensitivity Analyses

Using the REMSAD model, the contractor shall conduct modeling and sensitivity analyses to determine the sensitivity of the model results to changes in selected parameters. Specifically, an analysis shall be conducted to examine the sensitivity of the REMSAD model results to higher chlorine levels in the area around Great Salt Lake. Using the source "tagging" feature of REMSAD, modeling shall be conducted to identify deposition from sources identified by the COR, including cement kilns, as well as selected sources identified by COR based on suggestions from the EPA Regions and states. The contractor shall also conduct model runs using the CMAQ model with source "tagging" capability, and compare the CMAQ results with the REMSAD results, especially in the western US. In consultation with the COR, the contractor shall combine analyses where possible to minimize the number of model runs. Contractor shall provide the results to the COR report the results to the COR via memorandum. As determined necessary by the COR, deposition modeling results should be prepared in geographic information systems (GIS) compatible format.

Deliverables and schedule: Complete REMSAD and CMAQ model runs and sensitivity analyses within 90 days of sources identified by the COR to be tagged. _

Task 6: CART analysis

Conduct a Classification and Regression Tree (CART) analysis using the REMSAD model results and meteorological data to examine the impact of year-to-year meteorological variability on deposition results and

relative source contributions. A CART analysis was conducted under a previous work assignment (ICF #68-W-03-028, WA 4-30) for selected locations. CART is a statistical analysis in which values of a parameter (e.g., meteorological conditions) are matched with certain ranges of deposition, resulting in "bins" containing similar deposition and meteorological values. Using meteorological data for a 10-year period, the CART "bins" were then used to estimate how deposition would vary with different meteorological conditions. Under this work assignment, using the same CART procedure and locations, the contractor shall examine the extent to which the relative contributions from sources at a location (rather than just total deposition) would change with varying meteorological conditions.

Deliverables and schedule: Identify sites for CART analysis: within 30 days of work assignment approval. Complete CART analysis: within 3 months of sites identified for analysis.

Task 7: Analysis of Differences Between REMSAD and CMAQ Models

The contractor shall conduct analyses to determine the potential sources of differences between the REMSAD and CMAQ model results, especially regarding predictions of mercury dry deposition in the western US. Analyses shall include simulations in which both models use the same elemental Hg (mercury), divalent mercury (Hg(2)), and particulate mercury in order to examine differences in deposition velocities. An analysis shall also be conducted to examine differences in mercury oxidation rates by having both models use the same concentrations for ozone, hydroxyl species, and other parameters. Depending on the results of the first two analyses, an additional analysis may be conducted to examine the differences in vertical mixing. The contractor shall report the results to the EPA COR in writing via email.

Deliverables and schedule: Complete initial analyses comparing deposition velocities and oxidation rates within 60 days of work assignment approval. Depending on results of first two analyses, complete additional analyses within 60 days after completion of first two analyses.

Task 8: Publication on mercury from wildfires

The modeling conducted under a previous work assignment (ICF #68-W-03-028, WA 4-30) included an analysis of mercury deposition due to wildfires, particularly in the Western US. The modeling results have already been compiled into a written report on mercury deposition from wildfires under the previous work assignment. The contractor shall assist the COR in modifying the existing report on wildfires in the form of a paper for publication in a peer-reviewed scientific journal. The EPA COR shall identify the scientific journal.

Deliverables and schedule: Draft paper for COR review: within 60 days of work assignment approval. Final paper for submission to journal: within 120 days of work assignment approval.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number
0-6

[] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	ATMOSPHERIC DEPOSITION MODELING SUPPORT FOR TMDLs and WATERSHED ANALYSES

Contractor
ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out
[X] Work Assignment Amendment [] Incremental Funding
[X] Work Plan Approval

Periods of Performance
From: 06/05/08 To: 03/10/09

Comments:
Tasks 1, 2 and 7 as included in the workplan are approved. A revised Task 4 is provided and allocated 44 hours and an estimated cost of $6,313.00 for performance. Tasks 3, 6, and 8 are not approved; no costs should be incurred against these tasks from receipt of this notification.

[] Superfund **Accounting and Appropriations Data** [X] Non-Superfund

Line	OC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	350
This Action	$0.00	(18)
Total	$0.00	332

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 06/25/08	Cost/Fee: $46,772.00	LOE: 332
Cumulative Approved:	Cost/Fee: $0.00	LOE: 332

Work Assignment Manager Name RUTH A. CHEMERYS (Signature) (Date)	Branch/Mail Code 4503-T Phone Number 202-566-1216 Fax Number 202-566-1437
Project Officer Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER (Signature) 7-9-08 (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		ATMOSPHERIC DEPOSITION MODELING SUPPORT FOR TMDLs and WATERSHED ANALYSES
Period of Performance:	From:	06/05/08
	To:	03/10/09
Award Date:		06/05/08
Total Funding:		

Attachments

The following item(s) have been added:

Attachment Name
Revised Task 4

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 350 to 332.

Revised Task 4 - 44 hours approved for this Task.

The contractor (ICF) shall conduct a model run using the CMAQ model with source "tagging" capability and compare the CMAQ results with the REMSAD results, especially in the western U.S. ICF shall conduct a single CMAQ simulation including a limited number of tags (up to 10) for comparison with the REMSAD results. Tags to be used in the simulation will be the same as tags in REMSAD simulations already conducted in this task or in prior applications. The CMAQ simulations will cover a winter and summer month. The specific tags to use in the CMAQ simulation will be chosen in consultation with the WAM.

The contractor shall report the results of the modeling to the EPA WAM in a memorandum. As directed by the EPA WAM, ICF will prepare the modeling results from this task in GIS format for delivery to EPA.

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-7

[X] Original [ ] Amendment Number:

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contractor	Specify Section and Paragraph of Contract SOW
ICF SERVICES COMPANY, L.L.C.	

Purpose: [X] Work Assignment Initiation [ ] Work Assignment Close-Out [ ] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 08/15/08 To: 03/10/09

Comments:
The contractor shall provide a workplan which addresses the complete SOW as well as work to be accomplished just through the base period of the contract. The contractor shall contact the WAM prior to developing the workplan to clarify the SOW. The government intends to award a new work assignment in Option Period I to complete this effort.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 8)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved		
This Action		
Total	$0.00	3,108

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 3,108

Work Assignment Manager Name MICHAEL J. LOUGHRAN (Signature) (Date)	Branch/Mail Code Phone Number (202)564-6686 Fax Number
Project Officer Name SHELBY N. SCHULLER (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-0966 Fax Number 202-564-2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name DEBRA A. MILLER Debra A Miller 8-15-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number 202-564-2554

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*	Date

EPA Form 1900-69 (Rev. 07-95)

SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contract: EP-W-08-018, Work Assignment: 0-7

Summary Information

Title:		SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY
Period of Performance:	From:	08/15/08
	To:	03/10/09
Award Date:		
Total Funding:		

Procurement Management Roles

WORK ASSIGNMENT MANAGER:

U.S. E.P.A.
Attn: MICHAEL J. LOUGHRAN
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code:
Phone Number: (202)564-6686
Fax Number:
E-Mail Address: loughran.michael@epa.gov

Attachments

Attachment Name
SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contract: EP-W-08-018, Work Assignment: 0-7

Background

EPAs Global Change Research Program within the Office of Research and Development is an assessment-oriented program with primary emphasis on evaluating the potential consequences of global change (particularly climate change and climate variability) on air quality, water quality, ecosystems, human health, economic activity, and social well-being in the United States. This includes improving the scientific basis for evaluating effects of climate change in the context of other stressors, and evaluating the risks and opportunities presented by climate change. The Program uses the results of these studies to work in partnership with State, local, and regional partners to investigate and identify adaptation options to improve societys ability to effectively respond to the risks and opportunities presented by global change. The Program works in partnership with States to provide scientific results that inform the development of their own Climate Change Strategies. The Program also conducts research to support future rule making on the mitigation of greenhouse gas (GHG) emissions.

This work assignment is intended to support a partnership with the State of Alaska to develop its Climate Change Strategy, which will include a component focused on adaptation to climate change and a component focused on the mitigation of GHG emissions.

On September 14, 2007, Alaska Governor Palin signed Administrative Order 238, creating the Climate Change Sub-Cabinet. The Sub-Cabinet advises the Office of the Governor on the preparation and implementation of an Alaska Climate Change Strategy. The Administrative Order acknowledged that:

> *Scientific evidence shows many areas of Alaska are experiencing a warming trend. Many experts predict that Alaska, along with our northern latitude neighbors, will continue to warm at a faster pace than any other state, and the warming will continue for decades. Climate change is not just an environmental issue. It is also a social, cultural, and economic issue important to all Alaskans. As a result of this warming, coastal erosion, thawing permafrost, retreating sea ice, record forest fires, and other changes are affecting, and will continue to affect, the lifestyles and livelihoods of Alaskans. Alaska needs a strategy to identify and mitigate potential impacts of climate change and to guide its efforts in evaluating and addressing known or suspected causes of climate change. Alaska's climate change strategy must be built on sound science and the best available facts and must recognize Alaska's interest in economic growth and the development of its resources.*

The purpose of the Climate Change Sub-Cabinet is to advise the Office of the Governor on the preparation and implementation of an Alaska Climate Change Strategy. This Strategy will include building the state's knowledge of the actual and foreseeable effects of climate warming in Alaska, developing appropriate measures and policies to prepare communities in Alaska for the anticipated impacts from climate change, and providing guidance regarding Alaska's participation in regional and national efforts addressing the causes and effects of climate change.

The Alaska Department of Environmental Conservation (ADEC) is responsible for organizing and implementing the stakeholder-oriented process to develop the Alaska Climate Change Strategy. This work assignment is intended to support that process, resulting in delivery of a draft Climate Change Strategy document to Governor Palin's Sub-Cabinet on Climate Change in the summer of 2009. Support will be provided to develop both the mitigation and adaptation components of the Climate Change Strategy.

The EPA Office of Research and Development requests preparation of a work plan that will include a detailed technical and staffing plan with a cost estimate that aims to meet the requirements of the three tasks outlined in the following Statement of Work.

Consistency of this Work Assignment with the Statement of Work for the Mission Contract

The tasks called for in this work assignment are consistent with the Statement of Work for the Economic, Engineering, and Environmental Modeling, Analysis, and Assessment Mission Contract. In particular, the tasks are consistent with the activities called for in the section on Expert Panels, Work Groups, and Special Studies, the Environmental Assessment, Evaluative Analysis, and Impacts Modeling section, and the Technical Support Activities section of the mission contract.

The Expert Panels, Work Groups, and Special Studies section of the mission contract calls for the contractor to employ expert panels, work groups, and special studies when EPA identifies analysis activities or special studies that require nationally and internationally recognized experts beyond the contractors immediate staff. Tasks 1 and 2 of this work assignment require such contractor support.

The Technical Support Activities section of the mission contract calls for the contractor to develop training materials, as well as to provide communications, outreach, design, graphics, and meeting facilitation support. All three Tasks in this work assignment require such contractor support.

The Environmental Assessment, Evaluative Analysis, and Impacts Modeling section calls for the contractor to perform a variety of assessment activities, some of which will be required under this work assignment (particularly in Task 3).

Task 1: Support for Technical Workgroup Process

The Alaska Department of Environmental Conservations efforts are organized into two broad themes. Adaptation includes those measures that can be taken to respond to the effects of climate change. Mitigation refers to measures to reduce Alaskas greenhouse gas emissions and to address other sources and causes of climate change. An Adaptation Advisory Group oversees the development of the adaptation section of the Alaska Climate Change Strategy, and a Mitigation Advisory Group oversees the development of the mitigation section of the Alaska Climate Change Strategy.

The efforts of the Adaptation Advisory Group and the Mitigation Advisory Group are supported by the efforts of Technical Work Groups (TWGs). The members of each TWG have been identified by the Climate Change Sub-Cabinet. Consistent with the stakeholder-orientation of the entire strategy-development process, the members are all stakeholders from various sectors and communities in Alaska.

The contractor shall organize and facilitate the meetings of the four TWGs focused on adaptation issues, and provide a facilitator for one of the TWGs focused on mitigation issues. (The activities of all five of these TWGs are consistent with the mission of EPAs Global Change Research Program.)

Specifically, the contractor shall facilitate the meetings of the four TWGs supporting the Adaptation Advisory Group. The four adaptation TWGs focus on how to address present and future impacts on:

1. Public Infrastructure
2. Health and Culture
3. Natural Systems
4. Economic Activities

The contractor shall also provide a facilitator for the Energy Supply and Demand TWG that supports the

Mitigation Advisory Group. This mitigation TWG will examine ways in which greenhouse gas emissions can be reduced through conservation, efficiency and technological advances.

Specific activities required as part of meeting facilitation:

Between September 1, 2008 and April 30, 2009, the contractor shall organize and facilitate six meetings for each of the Adaptation TWGs. These meetings shall be held via conference call. In addition, the contractor shall organize and facilitate two in-person meetings for each of the Adaptation TWGs. The in-person meetings shall be held in Alaska. The schedule for the TWGs meeting shall be coordinated with the Alaska Department of Environmental Conservation. One of the two in-person meetings shall occur in conjunction with the 2009 Alaska Forum on the Environment (to be held on February 2-6, 2009). Facilities for all meetings shall be provided by the Alaska Department of Environmental Conservation, so the contractor shall not incur any expenses associated with the facilities.

The contractor shall provide facilitators for all five TWGs (including the Mitigation TWG). The contractor shall ensure that the facilitators for the Adaptation TWGs are present in Alaska at all in-person meetings, and that they all attend the 2009 Alaska Forum on the Environment (which will be organized around the four TWG topics). The facilitators shall record notes that summarize the discussions at each meeting. The contractor shall then maintain a website and post summary notes from each meeting on the website. The contractor shall also post documents required at the TWG meeting on the website in advance of all TWG meetings.

The contractor will coordinate closely with the ADEC Project Coordinator and the ADEC Commissioner throughout this process to ensure that the meetings are run effectively and adhere to the stakeholder-orientation of the strategy-development process.

All meetings shall be announced in advance on the website and open to the public.

Task 2: Support for Advisory Group Process

The Alaska Department of Environmental Conservation (ADEC) expects there to be four meetings of the Adaptation Advisory Group between September 2008 and April 2009. The Adaptation Advisory Group will assemble information from the Technical Work Groups and deliver final recommendations to the Sub-Cabinet. The contractor will help organize the four meetings and ensure that key Advisory Group members are able to attend and participate.

The contractor shall ensure that one of its senior project managers is present at all four Adaptation Advisory Group meetings to help facilitate the discussions. The contractor shall also ensure that the TWG facilitators provide reports to the Advisory Groups on the conclusions and recommendations from their respective TWGs.

The contractor shall post summary notes from each Adaptation Advisory Group meeting on the website. The contractor shall also post documents required at the Adaptation Advisory Group meeting on the website in advance of all Advisory Group meetings.

The contractor will coordinate closely with the ADEC Project Coordinator and the ADEC Commissioner throughout this process to ensure that the meetings are run effectively and adhere to the stakeholder-orientation of the strategy-development process.

All meetings shall be announced in advance on the website and open to the public.

Task 3: Development of Draft Climate Change Strategy Document

The Adaptation Advisory Group will assemble information from the Technical Work Groups and deliver final recommendations to the Sub-Cabinet. The Sub-Cabinet, in turn, will evaluate the recommendations and submit a proposed Climate Change Strategy to the Governor. The contractor will provide technical assistance to the Alaska Department of Environmental Conservation (ADEC), which will be responsible for writing the report on behalf of the Sub-Cabinet. The contractor shall assist in the preparation of the recommendations to be presented in the proposed Climate Change Strategy. The contractor shall ensure that senior contractor staff assisting with this process have expertise with issues related to adaptation to climate change. The contractor shall work closely with the ADEC Project Coordinator and the ADEC Commissioner to assemble information from the TWGs and the Adaptation Advisory Group, which will be used as input to the final Climate Change Strategy. The contractor shall also provide the ADEC with draft text as input to the final report. This Task shall be completed by July 1, 2009.

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-7

[ ] Original [X] Amendment Number: 1

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 08/15/08 To: 03/10/09

Comments:
The purpose of this amendment is to revise the SOW and LOE.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	3,108
This Action	$0.00	(378)
Total	$0.00	2,730

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $0.00	LOE: 2,730

Work Assignment Manager Name: MICHAEL J. LOUGHRAN (Signature) (Date)	Branch/Mail Code Phone Number (202)564-6686 Fax Number
Project Officer Name: SHELBY N. SCHULLER (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-0966 Fax Number 202-564-2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name: DEBRA A. MILLER Debra A Miller 8-25-08 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number 202-564-2554

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)* | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY
Period of Performance:	From:	08/15/08
	To:	03/10/09
Award Date:		08/15/08
Total Funding:		

Attachments

The following item(s) have been added:

Attachment Name
REVISED SOW

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 3108 to 2730.

Background

EPAs Global Change Research Program within the Office of Research and Development is an assessment-oriented program with primary emphasis on evaluating the potential consequences of global change (particularly climate change and climate variability) on air quality, water quality, ecosystems, human health, economic activity, and social well-being in the United States. This includes improving the scientific basis for evaluating effects of climate change in the context of other stressors, and evaluating the risks and opportunities presented by climate change. The Program uses the results of these studies to work in partnership with State, local, and regional partners to investigate and identify adaptation options to improve societys ability to effectively respond to the risks and opportunities presented by global change. The Program works in partnership with States to provide scientific results that inform the development of their own Climate Change Strategies. The Program also conducts research to support future rule making on the mitigation of greenhouse gas (GHG) emissions.

This work assignment is intended to support a partnership with the State of Alaska to develop its Climate Change Strategy, which will include a component focused on adaptation to climate change and a component focused on the mitigation of GHG emissions.

On September 14, 2007, Alaska Governor Palin signed Administrative Order 238, creating the Climate Change Sub-Cabinet. The Sub-Cabinet advises the Office of the Governor on the preparation and implementation of an Alaska Climate Change Strategy. The Administrative Order acknowledged that:

> *Scientific evidence shows many areas of Alaska are experiencing a warming trend. Many experts predict that Alaska, along with our northern latitude neighbors, will continue to warm at a faster pace than any other state, and the warming will continue for decades. Climate change is not just an environmental issue. It is also a social, cultural, and economic issue important to all Alaskans. As a result of this warming, coastal erosion, thawing permafrost, retreating sea ice, record forest fires, and other changes are affecting, and will continue to affect, the lifestyles and livelihoods of Alaskans. Alaska needs a strategy to identify and mitigate potential impacts of climate change and to guide its efforts in evaluating and addressing known or suspected causes of climate change. Alaska's climate change strategy must be built on sound science and the best available facts and must recognize Alaska's interest in economic growth and the development of its resources.*

The purpose of the Climate Change Sub-Cabinet is to advise the Office of the Governor on the preparation and implementation of an Alaska Climate Change Strategy. This Strategy will include building the state's knowledge of the actual and foreseeable effects of climate warming in Alaska, developing appropriate measures and policies to prepare communities in Alaska for the anticipated impacts from climate change, and providing guidance regarding Alaska's participation in regional and national efforts addressing the causes and effects of climate change.

The Alaska Department of Environmental Conservation (ADEC) is responsible for organizing and implementing the stakeholder-oriented process to develop the Alaska Climate Change Strategy. This work assignment is intended to support that process, ultimately resulting in delivery of a draft Climate Change Strategy document to Governor Palin's Sub-Cabinet on Climate Change in the summer of 2009. Support will be provided to develop both the mitigation and adaptation components of the Climate Change Strategy.

The EPA Office of Research and Development requests preparation of a work plan that will include a detailed

technical and staffing plan with a cost estimate that aims to meet the requirements of the two tasks outlined in the following Statement of Work. The period of performance for the two tasks ends on March 10, 2009.

Consistency of this Work Assignment with the Statement of Work for the Mission Contract

The tasks called for in this work assignment are consistent with the Statement of Work for the Economic, Engineering, and Environmental Modeling, Analysis, and Assessment Mission Contract. In particular, the tasks are consistent with the activities called for in the section on Expert Panels, Work Groups, and Special Studies, the Environmental Assessment, Evaluative Analysis, and Impacts Modeling section, and the Technical Support Activities section of the mission contract.

The Expert Panels, Work Groups, and Special Studies section of the mission contract calls for the contractor to employ expert panels, work groups, and special studies when EPA identifies analysis activities or special studies that require nationally and internationally recognized experts beyond the contractors immediate staff. Tasks 1 and 2 of this work assignment require such contractor support.

The Technical Support Activities section of the mission contract calls for the contractor to develop training materials, as well as to provide communications, outreach, design, graphics, and meeting facilitation support. Both tasks in this work assignment require such contractor support.

Task 1: Work Plan
The contractor shall submit a work plan in accordance with the contract.

Task 2: Support for Technical Workgroup Process

The Alaska Department of Environmental Conservations efforts are organized into two broad themes. Adaptation includes those measures that can be taken to respond to the effects of climate change. Mitigation refers to measures to reduce Alaskas greenhouse gas emissions and to address other sources and causes of climate change. An Adaptation Advisory Group oversees the development of the adaptation section of the Alaska Climate Change Strategy, and a Mitigation Advisory Group oversees the development of the mitigation section of the Alaska Climate Change Strategy.

The efforts of the Adaptation Advisory Group and the Mitigation Advisory Group are supported by the efforts of Technical Work Groups (TWGs). The members of each TWG have been identified by the Climate Change Sub-Cabinet. Consistent with the stakeholder-orientation of the entire strategy-development process, the members are all stakeholders from various sectors and communities in Alaska.

The contractor shall organize and facilitate the meetings of the four TWGs focused on adaptation issues, and provide a facilitator for one of the TWGs focused on mitigation issues. (The activities of all five of these TWGs are consistent with the mission of EPAs Global Change Research Program.)

Specifically, the contractor shall facilitate the meetings of the four TWGs supporting the Adaptation Advisory Group. The four adaptation TWGs focus on how to address present and future impacts on:
1. Public Infrastructure
2. Health and Culture
3. Natural Systems
4. Economic Activities

The contractor shall also provide a facilitator for the Oil and Gas TWG that supports the Mitigation Advisory Group. This mitigation TWG will examine ways in which greenhouse gas emissions can be reduced through conservation, efficiency and technological advances.

Specific activities required as part of meeting facilitation:

Between September 1, 2008 and March 10, 2009, the contractor shall organize and facilitate four meetings for each of the Adaptation TWGs. These four meetings shall be held via conference call. In addition, the contractor shall organize and facilitate two in-person meetings for each of the Adaptation TWGs. The in-person meetings shall be held in Alaska. The schedule for the TWGs meeting shall be coordinated with the Alaska Department of Environmental Conservation. One of the two in-person meetings shall occur in conjunction with the 2009 Alaska Forum on the Environment (to be held on February 2-6, 2009). Facilities for all meetings shall be provided by the Alaska Department of Environmental Conservation, so the contractor shall not incur any expenses associated with the facilities.

The contractor shall provide facilitators for all five TWGs (including the Mitigation TWG). The contractor shall ensure that the facilitators for the Adaptation TWGs are present in Alaska at all in-person meetings, and that they all attend the 2009 Alaska Forum on the Environment (which will be organized around the four TWG topics). The facilitators shall record notes that summarize the discussions at each meeting. The contractor shall then maintain a website and post summary notes from each meeting on the website. The contractor shall also post documents required at the TWG meeting on the website in advance of all TWG meetings.

The contractor will coordinate closely with the ADEC Project Coordinator and the ADEC Commissioner throughout this process to ensure that the meetings are run effectively and adhere to the stakeholder-orientation of the strategy-development process.

All meetings shall be announced in advance on the website and open to the public.

Deliverable:

A draft written meeting summary for each conference call and in person meeting will be made electronically available to ADEC and TWG members for review and comment within 5 working days after each meeting. TWG/ADEC revisions will be incorporated into the draft and a final meeting summary will be posted on web site within 10 working days after meeting. Summary documents should reflect any recommendations/conclusions reached during the meeting.

Task 3: Support for Advisory Group Process

The Alaska Department of Environmental Conservation (ADEC) expects there to be three meetings of the Adaptation Advisory Group (AAG) between September 2008 and March 10, 2009. The AAG will assemble information from the Technical Work Groups in preparation for delivery of final recommendations to the Sub-Cabinet. The contractor will help organize the three meetings and ensure that key AAG members are able to attend and participate.

The contractor shall ensure that one of its senior project managers is present at all three AAG meetings to help facilitate the discussions. The contractor shall also ensure that the TWG facilitators provide meeting summary reports to the Advisory Groups on the conclusions and recommendations from their respective TWGs.

The contractor shall post summary notes from each AAG meeting on the website. The contractor shall also post

documents required at the AAG meeting on the website in advance of all meetings.

The contractor will coordinate closely with the ADEC Project Coordinator and the ADEC Commissioner throughout this process to ensure that the meetings are run effectively and adhere to the stakeholder-orientation of the strategy-development process.

All meetings shall be announced in advance on the website and open to the public.

Deliverables:

1. A draft written meeting summary for each Advisory Group meeting will be made electronically available to ADEC and AAG members for review and comment within 5 working days after each meeting. ADEC/AAG revisions will be incorporated into the draft and a final meeting summary will be posted on web site within 10 working days after meeting. Summary documents should reflect any recommendations/conclusions reached during the meeting.

2. Progress Report: Contractor shall provide a brief progress report on TWG and AAG activities by December 1, 2008. The progress report, to be made available to ADEC and EPA COR, should include the following elements:
   TWG and AAG participation (e.g. attendance) with an assessment of general productivity of each group;
   Identification of any gaps in expertise, time constraints etc..
   Recommendations for any process improvements to increase effectiveness.

3. Within 1 week following the third AAG meeting, the contractor shall prepare a Draft Table of Contents (TOC) for the Climate Changes Strategy report. The draft TOC should be made electronically available to both ADEC and EPA's COR.

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-7

[ ] Original [X] Amendment Number: 2

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [X] Work Plan Approval

Periods of Performance: From: 08/15/08 To: 03/10/09

Comments:
Work Plan approval is provided for submission dated 10/1/08 and revision dated 10/9/08. Please incorporate the following change to workplan. Page 3, last sentence of the first paragraph below bulleted list should read: ICF has assumed that each option will incude a 4-5 page description, and that ADEC will reconcile input from stakeholders on options.

[ ] Superfund **Accounting and Appropriations Data** [X] Non-Superfund

Line	DC (Max 8)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$0.00	2,730
This Action	$343,451.00	(395)
Total	$343,451.00	2,335

Work Plan / Cost Estimate Approvals

Contractor WP Dated: 10/09/08	Cost/Fee: $343,451.00	LOE: 2,335
Cumulative Approved:	Cost/Fee: $343,451.00	LOE: 2,335

Work Assignment Manager Name: MICHAEL J. LOUGHRAN
(Signature) (Date)
Branch/Mail Code:
Phone Number: (202)564-6686
Fax Number:

Project Officer Name:
(Signature) (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564
Fax Number: 202-564-2554

Other Agency Official Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Contracting Official Name: DEBRA A. MILLER
(Signature) Debra A Miller 10-21-08 (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564-1041
Fax Number: 202-564-2554

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*
Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY
Period of Performance:	From:	08/15/08
	To:	03/10/09
Award Date:		08/15/08
Total Funding:		

WA Totals

The following item(s) have been added:

Category	POP	Amount
Estimated Cost	Base Pd.	$ (b)(4)
Fixed Fee	Base Pd.	

WA Classification

The following changes have occurred:

The Labor Hour Ceiling has changed from 2730 to 2335.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 0-7

[] Original [X] Amendment Number: 3

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [] Work Assignment Initiation [] Work Assignment Close-Out [X] Work Assignment Amendment [] Incremental Funding [] Work Plan Approval

Periods of Performance: From: 08/15/08 To: 03/10/09

Comments:
This amendment is issued to increase the authorized ceiling amount to $208,000.00, the contractor shall not exceed this amount without prior approval from the Contracting Officer.

[] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$343,451.00	2,335
This Action	$0.00	0
Total	$343,451.00	2,335

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $343,451.00	LOE: 2,335

Work Assignment Manager Name: MICHAEL J. LOUGHRAN
(Signature) (Date)
Branch/Mail Code:
Phone Number: (202)564-6686
Fax Number:

Project Officer Name: SHELBY N. SCHULLER
(Signature) (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564-0966
Fax Number: 202-564-2554

Other Agency Official Name:
(Signature) (Date)
Branch/Mail Code:
Phone Number:
Fax Number:

Contracting Official Name: SHELBY N. SCHULLER
Shelby Nicole Schuller 12/31/08
(Signature) (Date)
Branch/Mail Code: 3803R
Phone Number: 202-564-0966
Fax Number: 202-564-2554

Contractor Acknowledgement of Receipt and Approval of Workplan *(Signature and Title)*

Date

EPA Form 1900-69 (Rev. 07-95)

United States Environmental Protection Agency
Washington, DC 20460

EPA Work Assignment

Work Assignment Number: 0-7

[ ] Original [X] Amendment Number: 4

Contract Number	Contract Period	Title of Work Assignment
EP-W-08-018	Base X Option Period Number	SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY

Contractor: ICF SERVICES COMPANY, L.L.C.

Specify Section and Paragraph of Contract SOW:

Purpose: [ ] Work Assignment Initiation [ ] Work Assignment Close-Out [X] Work Assignment Amendment [ ] Incremental Funding [ ] Work Plan Approval

Periods of Performance: From: 08/15/08 To: 03/10/09

Comments:
This amendment is issued to increase the authorized ceiling amount to $308,000.00, the contractor shall not exceed this amount without prior approval from an authorized Contracting Officer.

[ ] Superfund

Accounting and Appropriations Data

[X] Non-Superfund

Line	DC (Max 6)	Budget/FYs (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee	LOE
Previously Approved	$343,451.00	2,335
This Action	$0.00	0
Total	$343,451.00	2,335

Work Plan / Cost Estimate Approvals

Contractor WP Dated :	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee: $343,451.00	LOE: 2,335

Work Assignment Manager Name: MICHAEL J. LOUGHRAN (Signature) (Date)	Branch/Mail Code Phone Number (202)564-6686 Fax Number
Project Officer Name: SHERMAN E. FARVES (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-2185 Fax Number 202-564-2554
Other Agency Official Name (Signature) (Date)	Branch/Mail Code Phone Number Fax Number
Contracting Official Name: DEBRA A. MILLER Debra A Miller 1-30-09 (Signature) (Date)	Branch/Mail Code 3803R Phone Number 202-564-1041 Fax Number 202-564-2554

Contractor Acknowledgement of Receipt and Approval of Workplan (Signature and Title) | Date

EPA Form 1900-69 (Rev. 07-95)

Summary Information

Title:		SUPPORT FOR DEVELOPMENT OF ALASKA CLIMATE CHANGE STRATEGY
Period of Performance:	From:	08/15/08
	To:	03/10/09
Award Date:		08/15/08
Total Funding:		

Procurement Management Roles

The following item(s) have been modified:

CONTRACT SPECIALIST:

U.S. E.P.A.
Attn: SHERMAN E. FARVES
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20460

Mail Code: 3803R
Phone Number: 202-564-0966
Fax Number: 202-564-2554
E-Mail Address: farves.sherman@epa.gov

PROJECT OFFICER:

U.S. E.P.A.
Attn: SHERMAN E. FARVES
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